REQUEST FOR CITY COUNCIL ACTION

8801616
HCA-0079

Date November 2, 1987

Submitted to: Honorable Mayor and City Council Members

Submitted by: Paul E. Cook, Acting City Administrator PEC

Prepared by: Douglas N. La Belle, Deputy City Administrator/Community Development

Subject: BOLSA CHICA STATE BEACH GENERAL PLAN AMENDMENT/ ENVIRONMENTAL IMPACT ELEMENT

Consistent with Council Policy? [ ] Yes [ ] New Policy or Exception

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Statement of Issue, Recommendation, Analysis, Funding Source, Alternative Actions, Attachment(s):

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STATEMENT OF ISSUE:

The City of Huntington Beach has recently assumed responsibility for operation of the State Beach area north of the City Pier. As part of the City's new responsibility for operation of the State Beach, the State Department of Parks and Recreation requires that a number of documents be prepared and submitted to them for approval. Those documents are: (1) General plan; (2) Environmental Impact Element; (3) Resources Summary; and (4) Resource Inventory. In order to prepare the above documents, the City has retained the services of Barrett Consulting Group.

RECOMMENDATION:

Planning Commission Action on September 15, 1987:

ON MOTION BY LIVENGOOD, SECOND BY PIERCE, THE STATE BEACH GENERAL PLAN WAS APPROVED FOR RECOMMENDATION WITH MODIFICATIONS, BY THE FOLLOWING VOTE:

AYES: Silva, Schumacher, Higgins, Pierce, Leipzig, Summerell, Livengood
NOES: None
ABSENT: None
ABSTAIN: None

Planning Commission Recommendation:

Approve the State Beach General Plan with the facility recommendations identified in Resolution A, (Attachment 1), and recommend adoption to the California State Parks and Recreation Commission.

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Staff Recommendation:

As an alternative to the Planning Commission's recommendation, staff recommends approval of the State Beach General Plan by adopting the Resolution B (Attachment 2). The outline below is an analysis and comparison of the two recommendations.

ANALYSIS:

The draft State Beach General Plan, as it has been prepared for adoption, is essentially an extension of the bluff top park from the pier northward to the developed portion of Bolsa Chica State Beach. The intent is to interconnect the entire beachfront area, (Huntington State Beach to Bolsa Chica State Beach), as a unified and complimentary recreational whole. For planning purposes, the subject beach area has been divided into three subareas. Area I extends from the Municipal Pier to 7th Street, Area II extends from 7th Street to Goldenwest Street, and Area III extends northward from Goldenwest Street. The draft General Plan with proposed modifications proposes the following uses in each of the three areas:

Area I:

- Construct a multi-level parking structure on the existing parking lot site consistent with the Esthetic Resources policy. This structure will not extend above the elevation of Pacific Coast Highway or beyond the existing bicycle path and will be designed to enhance view opportunities and to the greatest extent possible maintain existing scenic views of the ocean and shoreline from Pacific Coast Highway.
  (Planning Commission and staff agree -- scenic views sentence was suggested by State after Planning Commission review).

- Provide for passive (surf museum) and active (volleyball, basketball, etc.) recreation both within and on top of the parking structure, respectively. If necessary, prepare a feasibility assessment for the surf museum according to Department of Parks and Recreation Standards.
  (Planning Commission and staff agree with active recreation uses -- Planning Commission does not agree with surf museum).

- Provide for a commercial (food) pad on top of or within parking structure.
  (Planning Commission does not agree).

- Remove existing concession stand from beach area and relocate as part of parking structure at beach level.
  (Planning Commission and staff agree).

- Install permanent restrooms within parking structure.
  (Planning Commission and staff agree).

- Expand the decking area on the northside of the pier to accommodate new food concessions.
  (Planning Commission and staff agree).

- Place utility lines underground.
  (Planning Commission and staff agree).

- Allow for the development of beach safety facilities. (This item is not part of the list reviewed by the Planning Commission. Inclusion of this provision will require an addition to the supplemental document and the resolution for plan adoption).

*. Place utility lines underground.
(Planning Commission and staff agree).

*. Provide for viewing areas and seating benches.
(Planning Commission and staff agree).

*. Investigate extending City Beach into boundary of developed unit of the Bolsa Chica to provide for enhancement and preservation of shorebird habitat area.
(Planning Commission and staff agree).

*Items recommended by the Planning Commission and incorporated into the staff recommendation.

As indicated above, the majority of the proposed improvements are recreational in nature and entirely consistent with the existing zoning and general plan. The parking components are intended to replace on-street parking on Pacific Coast Highway which will be lost when the street is re-striped and will in no way impact any portion of the existing bluff area. The remainder of the proposed improvements are landscaping and concession oriented. It should be noted that consistent with the nature of General Plans, the proposed improvements are at this time only conceptual in nature. By including them in the General Plan, the City can pursue the detail design and entitlements necessary to implement the plan.

At their September 15, 1987 meeting, the Planning Commission approved the draft State Beach General Plan with a number of modifications. The principle change directed by the Planning Commission was that the restaurant be deleted from the parking structure in Area 1, and that no structures be constructed on top of the parking structure other than park related uses. The Planning Commission also directed that undergrounding of utilities be added to the list of improvements. These changes, as well as other minor wording changes, are contained in the Planning Commission's recommended resolution. All of the minor wording changes have also been added to staff's recommended resolution B, with the exception of the deletion of the restaurant in Area I.

On October 20, 1987, staff transmitted to the Planning Commission a copy of all written correspondence, including a response to these comments and supplemental documents requested by the Planning Commission along with a copy of their adopted resolution regarding facility recommendations. The Planning Commission then voted to direct staff to inform the Council that they had received that information. They also directed staff to indicate which components in the staff recommendation were recommended by them. These are the asterisked items in the analysis section of this report. The Planning Commission then voted to reaffirm their resolution for approval of the State Beach General Plan.

As a result of the Planning Commission public hearing, as well as the 30-day CEQA review period, staff has received many comments from the public, the Planning Commission and State Agencies. In order to address those comments, a supplemental report has been prepared for adoption with the State Beach General Plan. This supplemental document was prepared with the partial assistance of the State Parks and Recreation Department staff. Staff recommends that the document be approved in conjunction with the State Beach General Plan. The document will supplement and amend the draft General Plan as recommended by the various comments received. It should be

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noted that staff has not incorporated all of the State's original suggestions into the supplement. State staff is presently reviewing the supplemental document. The City Council may review all of the written comments and responses and direct staff to incorporate additional items into the supplement.

Upon City Council action on the Bolsa Chica State Beach General Plan Amendment, it will be forwarded to the State Parks Commission for final adoption. The State Parks Commission has scheduled a public hearing for adoption of the plan on December 1, 1987 at 10:30 AM. The hearing will be held in the Huntington Beach City Council Chambers in order to ensure convenient input from interested community citizens.

ENVIRONMENTAL INFORMATION:

Pursuant to Section 5002.2(a) of the Public Resources Code, the State Beach General Plan has been prepared in conjunction with an Environmental Impact Element. The draft EIE is incorporated in the document entitled State Beach General Plan. The State Clearinghouse has advertised the EIE for a 30-day review period which expired on September 21, 1987. All comments which were received have been responded to and are attached to this report.

FUNDING SOURCE:

No funds required.

ALTERNATIVE ACTION:

The City Council may add to or delete any of the components of the State Beach General Plan as they deem desirable.

ATTACHMENTS:

1. Resolution A - Planning Commission Recommendation
2. Resolution B - Staff Recommendation
3. Supplemental Documents to State Beach General Plan (Requested Revisions and Supplemental Graphics)
4. Written comments and responses
5. Fiscal Impact Analysis
6. Planning Commission staff report dated September 15, 1987
7. State Beach General Plan and Environmental Impact Element
8. Resource Element
9. Resource Summary
10. Resource Inventory

DLB:HS:kla

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RESOLUTION NO. 5822

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A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF HUNTINGTON BEACH RECOMMENDING APPROVAL OF THE BOLSA CHICA STATE BEACH GENERAL PLAN AMENDMENT

WHEREAS, the City of Huntington Beach has assumed responsibility for operation of Bolsa Chica State Beach north of the Municipal Pier; and

The California Public Resources Code requires that a General Plan Amendment be prepared for the Bolsa Chica State Beach area for approval by the State Park and Recreation Commission; and

The City of Huntington Beach is the responsible agency for preparation of the State Beach General Plan Amendment; and

The components listed in Exhibit 1 are recommended for inclusion in the State Beach General Plan Amendment; and

The State Beach General Plan Amendment and all of its recommended components are consistent with the City of Huntington Beach Zoning Code and General Plan; and

A public hearing on approval of the State Beach General Plan Amendment was held by the Planning Commission on September 15, 1987, in accordance with provisions of the State Government Code; and

A public hearing on the State Beach General Plan Amendment was held by the State Park and Recreation Commission on October 9, 1987; and

A public hearing on approval of the State Beach General Plan Amendment was held by the City Council on November 2, 1987, in accordance with provisions of the State Government Code.

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Huntington Beach hereby approves said State Beach General Plan Amendment.

BE IT FURTHER RESOLVED that said State Beach General Plan is recommended for approval by the State Park and Recreation Commission.

PASSED AND ADOPTED BY THE City Council of the City of Huntington Beach at a regular meeting thereof held on the 2nd of November, 1987.

Mayor

ATTEST:

Alicia M. Nextworth
City Clerk

APPROVED AS TO FORM:

City Attorney 10-20-87

REVIEWED AND APPROVED:

City Administrator

INITIATED AND APPROVED:

Director of Community Development

2612L:ps

EXHIBIT I

Area I:

- Construct a tri-level parking structure at the existing parking lot site on the north side of the Municipal Pier. (This structure will not extend above the elevation of Pacific Coast Highway or beyond the existing bicycle path.)
- Provide for passive (surf museum) and active (volleyball, basketball, etc.) recreation both within and on top of the parking structure, respectively.
- Provide for a commercial (food) pad on top of parking structure.
- Remove existing concession stand from beach area and relocate as part of parking structure at beach level.
- Install permanent restrooms with parking structure.
- Expand the decking area on the northside of the pier to accommodate new food concessions.
- Place utility lines underground.
- Provide for lifeguard facilities.

Area II:

- Install permanent restrooms at points of access.
- Install outdoor shower facilities.
- Install parking spaces along service road.
- Provide for vehicular access to service road (and proposed parking stalls) from Pacific Coast Highway at Goldenwest Street and 11th. Street.
- Provide for fast-food, take out concessions (the concessions shall not provide for interior seating).
- Place utility lines underground.
- Provide for screening of oil facilities in area.
- Provide for separation of vehicular and pedestrian traffic where feasible. Investigate the feasibility of a pedestrian overpass at both Goldenwest and 11th. Street.
- Provide for lifeguard facilities.

Area III:

- Realign and improve (landscaping) bicycle/pedestrian path.
- Provide off-street parking.
- Provide landscape/fence buffer between proposed parking lots and Pacific Coast Highway.
- Provide a buffer area between bluff edge and bicycle/pedestrian path.
- Install protective railing in the proposed buffer area.
- Install permanent restroom facilities at selected locations.
- Install access facilities (stairs or roadway) at strategic locations.
- Place utility lines underground.
- Provide for viewing areas and seating benches.
- Provide for lifeguard facilities.
- Investigate extending City Beach into boundary of developed unit of the Bolsa Chica to provide for enhancement and preservation of shorebird habitat area.

(9088d)

Res. No. 5822

STATE OF CALIFORNIA)
COUNTY OF ORANGE) ss:
CITY OF HUNTINGTON BEACH)

I, ALICIA M. WENTWORTH, the duly elected, qualified City Clerk of the City of Huntington Beach, and ex-officio Clerk of the City Council of said City, do hereby certify that the whole number of members of the City Council of the City of Huntington Beach is seven; that the foregoing resolution was passed and adopted by the affirmative vote of more than a majority of all the members of said City Council at a regular _____ meeting thereof held on the 2nd day of November, 1987, by the following vote:

AYES: Councilmen:
Mays, Kelly, Erskine, Bannister

NOES: Councilmen:
Wichell, Finley, Green

ABSENT: Councilmen:
None

Alicia M. Wentworth

City Clerk and ex-officio Clerk
of the City Council of the City
of Huntington Beach, California

RESOURCE SUMMARY FOR THE STATE BEACH GENERAL PLAN

SUBMITTED TO THE

CITY OF HUNTINGTON BEACH

JULY 30, 1987

Barrett Consulting Group Inc.

COSTA MESA, CALIFORNIA

RESOURCE SUMMARY

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INTRODUCTION

PURPOSE

The purpose of this Resource Summary is to consolidate the information contained within the Resource Inventory into a brief, concise format. Additionally, the Resource Summary will be utilized for the Resource Element that will establish long range management objectives and policies necessary to maintain the resource values of the unit. California Public Resources Code Section 5002.1 states that "prior to the classification or reclassification of a unit of the state park system ... an inventory of the unit's scenic, natural, and cultural features, including, but not limited to, ecological, archaeological, historical and geologic features ..." shall be established. The Resource Summary satisfies, in part, this legislation.

PROJECT DESCRIPTION

The project is known as the State Beach - City of Huntington Beach. It was formerly a portion of the Bolsa Chica State Beach. The unit is located between the Huntington Beach Municipal Pier and the City of Huntington Beach northerly municipal boundaries. It is between Pacific Coast Highway and the Pacific Ocean. It is approximately 2.3 miles in length and encompasses approximately 100 acres.

The unit is within the County of Orange and lies between the Bolsa Chica State Beach and the City of Huntington Beach Municipal Beach. Nearby communities include Fountain Valley, Newport Beach, Westminster and Seal Beach. The most prominent geographical entity is the Pacific Ocean that is southerly and easterly adjacent to the unit.

Another prominent landmark is the Bolsa Chica Wetlands that are located to the northeast of the subject unit. The wetlands have been the subject of thorough analyses, development alternatives and state legislation. The unit is located within the Coastal Strip landscape province, and specifically in a zone designated as an area between the Mexico border and Point Concepcion. The unit has direct access to and from Pacific Coast Highway along its entire length. Pacific Coast Highway has on-street parking along the oceanward side. Additional parking lots are located near the municipal pier between the beach and Pacific Coast Highway. There are a series of major arterials that terminate into Pacific Coast Highway which directly facilitate traffic from population areas to the unit. These arterials include Warner Avenue, Goldenwest Street and Beach Boulevard. The nearest freeway is the San Diego Freeway (S.R. 405) which is approximately five (5) miles from the unit.

The unit is adjacent to the large population centers of Orange County and is approximately 30 to 40 minutes of driving time away from the Los Angeles area. Pacific Coast Highway is served by the Orange County Transit District (OCTD) and has several bus stops adjacent to the unit. Primarily, the unit is served by OCTD Routes No. 25 and 29. The nearest airport is the John Wayne Airport which is located approximately 10 miles to the southwest. The Los Angeles International Airport is located approximately 40 miles to the north.

The City of Huntington Beach has assumed responsibility of this area from the State of California which has resulted in the reclassification of the unit. In assuming this responsibility, the City plans to continue its recreational improvements from Goldenwest Street to the northerly municipal boundary.

INVENTORY STUDY AREA

As previously mentioned, the unit is relatively small (100 acres) and has a long, narrow configuration. It is primarily composed of a beach area and a bluff area. At the southerly end of the unit, the beach area occupies the majority of the unit. As the unit extends northward, the beach area diminishes and the bluff area increases in width. The unit is occupied by a pier side parking area, a multiple family development, a concession stand, a series of oil pumps and a bluff top park between the municipal pier and Goldenwest Street. From Goldenwest Street to the northerly municipal boundary, the unit is void of improvements with the exception of some oil pumps and an asphalt bicycle/ pedestrian path.

Figures 1 and 2 depict the unit area (base map) and its location in a regional context, respectively.



FIGURE 1

PROJECT BASE MAP

BARRETT CONSULTING GROUP INC.

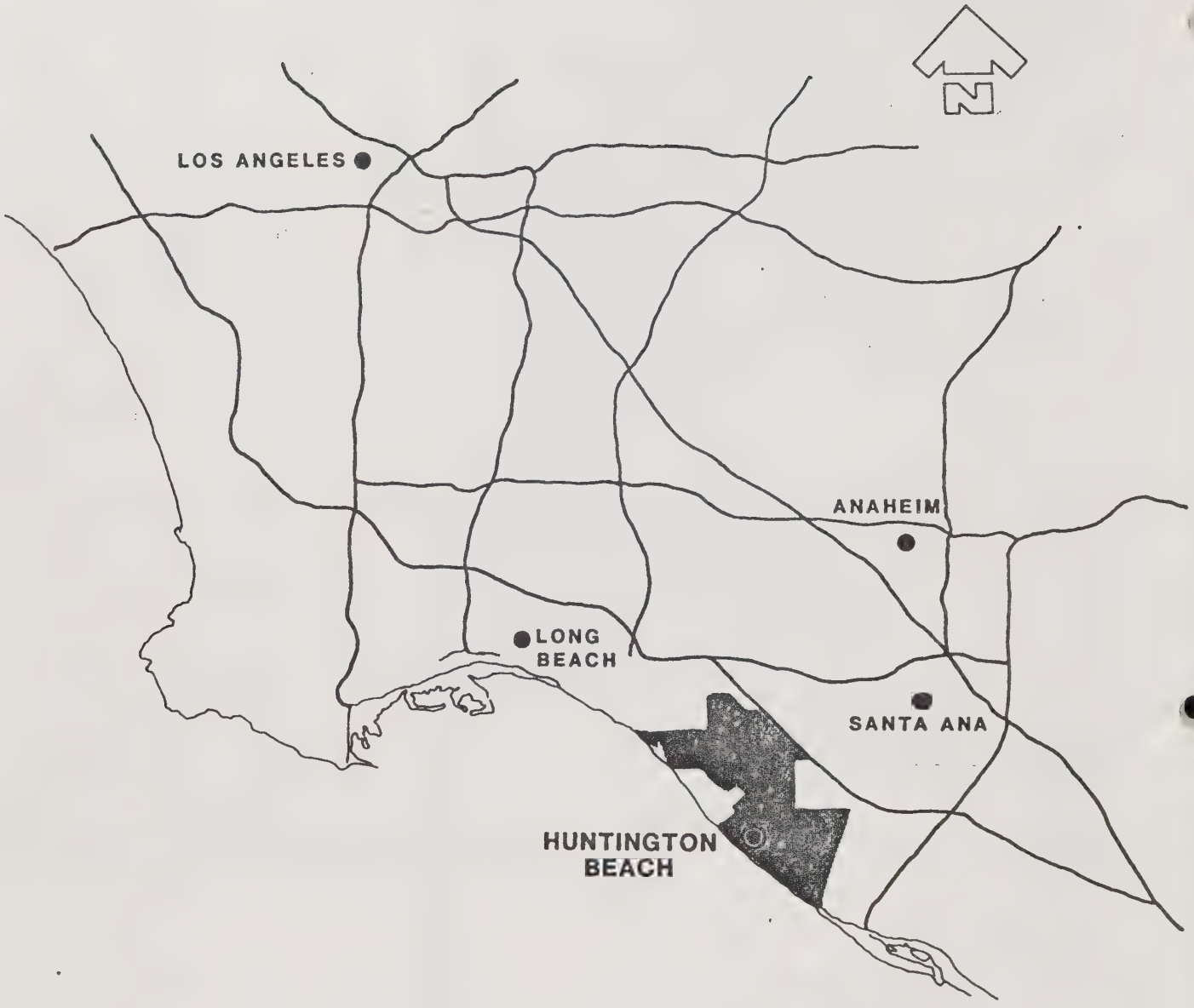


FIGURE 2

UNIT LOCATION (REGIONAL)

BARRETT CONSULTING GROUP INC.
3184-K Airway Avenue Costa Mesa, CA 92626 714/545-4335 Telex No. 314583

NATURAL RESOURCES

TOPOGRAPHY

The site of the 100-acre unit is near the southwestern onshore termination of the Newport-Inglewood structural zone. The unit's area extends from Pacific Coast Highway oceanward to the Ordinary High Water Mark. The local features affecting the topography of the park area are the Santa Ana Gap, Huntington Beach Mesa, the Bolsa Gap, and the shoreface itself. Elevations range between sea level and a maximum of 12 meters (40 feet) above sea level. The steepest elevations are encountered in the bluff area at the northwest end of the unit. Slopes range from 0 percent to nearly vertical.

METEOROLOGY

The unit experiences a Mediterranean semi arid steppe climate. Additionally, the unit's area is strongly influenced by the moderating effects of the ocean. The temperature regime is moderate. The average summer temperature is 21°C (67°F). The average winter temperature is 17°C (55°F).

Precipitation averages 28.7 cm (11.4 inches) per year. The rainy season extends from November to April, when greater than 90 percent of the annual rainfall occurs.

The presence of the marine layer results in moist air near the land surface along the coast. Over the ocean, the cool moist air results in a fog layer which recedes seaward during late morning and afternoon and moves onshore during late afternoon and evening. The fog encroaches onto the land more frequently in spring and summer months due to greater temperature variations between the ocean and land.

HYDROLOGY

The primary watershed affecting the unit is the Santa Ana River which currently discharges into the Pacific Ocean south of the unit. The Santa Ana River has water primarily between November and April.

The unit lies within the northeastern portion of the Orange County groundwater basin, where groundwater is contained in a series of pressured aquifers. These aquifers include the following:

- a semi perched zone;
- The Bolsa Aquifer;
- The Talbert Aquifer;
- The Upper Pleistocene Semi-Perched Zone;
- The Alpha Aquifer;

- The Beta Aquifer;
- The Lamdba Aquifer;
- The Meadowlark Aquifer;
- The Main Aquifer;
- The Lower Zone; and
- The Upper Pliocene Deposits.

The primary source of water for the unit is derived from the Main Aquifer. This Aquifer ranges from 150 to 250 feet in thickness and its base reaches a maximum elevation of 350 feet below mean sea level.

GEOLOGY

The subject unit lies near the northwestern flank of the Peninsular Ranges geomorphic province of southern California. The Peninsular Ranges province includes the Los Angeles structural basin, the offshore area known as the Continental Borderland, the Santa Ana Mountains and the rest of the Peninsular Ranges to the south, and extends from near latitude 34° North in the Los Angeles basin to the tip of the Baja California peninsula. Characterized by elongated northwest-trending mountain ridges separated by straight-sided sediment-floored valleys, the province has been uplifted, tilted seaward and sliced longitudinally into subparallel blocks by young, steeply dipping faults. These northwest to west-northwest trending fault zones separate large elongate blocks of different structural elevation which are terminated at their northwestern margin by the east-west trending structures of the Transverse Ranges province. The major faults appear to be late Cenozoic in age, and many are seismically active. The Newport-Inglewood structural zone is one of the major northwest trending structural elements of the northern portion of the Peninsular Ranges province. The onshore extent of the zone runs from the mouth of the Santa Ana River, just south of the subject unit, northwest to Beverly Hills.

The unit lies within the regional structural trough known as the Los Angeles basin. Non-marine to bathyal marine upper Cretaceous, Tertiary and Quaternary sediments deposited on crystalline rocks of both oceanic and continental basement compose the stratigraphic sequence of the basin. Strata consist primarily of conglomerates, sandstones, sands, shales, and mudstones. Sediments were derived from the north and east except during middle Miocene time when oceanic highlands are thought to have shed clastics from the south. The basin, which is bounded on the north by the San Gabriel and San Bernardino Mountains, on the south by the Pacific Ocean, and on the west and the east by the Santa Ana Mountains and San Joaquin Hills, is approximately 45 miles wide by 65 miles long. Geophysical studies show the total depth of the basin to be over 30,000 feet.

The oldest geologic formation is known as the Catalina Schist which ia a foliated metamorphic crystalline rock found at depths

of up to 15,000 feet. The Miocene Topanga Formation overlies the Catalina Schist. It consists of an alternating sequence of gray, medium-to coarse grain sandstone interbedded with gray siltstone and sandy siltstone. The next series is the Puente Formation which consists of sands, silts and clays of late Miocene Age. The Fernando Formation (informally known as the Repetto and Pico formations) overlies the Puente Formation. It is Pliocene age strata that consists of greenish-gray micaceous siltstone, sandy siltstone, fine grained sandstone and varying amounts of interedded gray medium- to coarse-grained sandstone. The San Pedro Formation is composed of shallow marine deposits. It is composed of silt, clay sand and gravel and is exposed in limited outcrops at the margins of the mesa area that is southeast of the unit. The Lakewood Formation consists of shallow marine, intertidal and continental deposits. It is exposed at the surface on the Huntington Beach Mesa which is easterly of the unit. Recent deposits within the unit include alluvial gravels, sands, silts, marsh deposits, and beach sands. Recent beach deposits form narrow strips fringing wave-cut sea cliffs of the relatively soft Pleistocene sediments of the coastal mesa.

There are several fault zones which could (and do) affect the unit. The primary fault is the Newport-Inglewood Fault Zone. The zone is characterized by lateral strike slip movement which dips steeply to the southwest beneath the ocean.

The unit is within a geological active area due to faulting and folding, continental tectonics, and wave and tidal erosion.

SOILS

There are essentially three soil types found within the unit. They are all classified within the Myford Association. The soil types, as classified by the U. S. Department of Agriculture Soil Conservation Service and Forest Service, are Beaches, Marina Loamy Sand - 0 to 2 percent slope, and Marina Loamy Sand - 2 to 9 percent slope. The erosion hazard ranges from slight to moderate assuming bare soil. Erosion occurs as a result of wave and tidal activity, pedestrian traffic and periodic precipitation.

PLANT LIFE

Approximately 25 species of plants representing 9 families have been identified within the unit. Twelve of these species are non-native to the area. The existing community is a mix of introduced species and remnant species of the native coastal strand community. It appears that most of the existing vegetation was planted for slope stabilization purposes and for esthetic effect.

No rare or endangered plants have been found in the unit.

ANIMAL LIFE

The amount of animal life within the unit is severly limited due to its configuration, size and intensive recreational use. The primary mammal within the unit is the California ground squirrel (Spermophilus beecheyi). The side-blotched lizard (Uta stansiburiana) is the only noticeable reptile observed within the unit.

There are a variety of shorebirds and gulls that migrate through the area. However, the unit does not contain nesting or prominent feeding areas. There are two endangered species, as listed by the U. S. Fish and Wildflife Service, which migrate through the unit. They are the California Least Tern (Sterna atillarum browni) and the California brown pelican (Pelecanus occidentalis californicus).

MARINE LIFE

The unit's nearshore marine habitat is not distinguished by lagoons, kelp beds, bays, or river months. It is exposed and directly affected by open surf. The fish community includes surf oriented species ranging from Jacksmelt (Atherminoosis californiensis) to California Halibut (Paralicthys californicus). The invetebrate population is a seasonal community that range Purple striped jellyfish (Pelagia noctiluca) to the Pismo clam (Tivela stultorum).

Phytoplankton occurs near the surface zone in neritic biotic communities. It is well documented that phytoplankton is a basic unit in earth's life support system. Phytoplankton provides for most of the atmospheric oxygen and serves as a basis of most marine food webs.

ECOLOGY

The unit is within the coastal strip ecological region as designated by the Public Resources Code. Site conditions of close proximity to the ocean, moderate climate and intensive human use are all influential on the local ecosystem.

Due to the extensive disturbance and surrounding urbanization, the ecosystem of the unit has been greatly simplified. The existing vegetation provides food and nest material for the resident population of ground dwelling mammals. Reptiles and birds feed on insects which are attracted to the local plant species. Gulls, shorebirds and common birds of urban areas feed on refuse left on the beach by human visitors and or local vegetation. Additionally, the unit's size does not allow it to be classified as an ecological entity. It does not contain a wetland or marine system. The Pacific Ocean is westerly and southerly adjacent to the unit. There are no unique features (e.g., bays, coves, lagoons, reefs, etc.) which would provide an area of study or interest.

CULTURAL RESOURCES

ARCHAEOLOGICAL SITES

There are no known archaeological sites within the unit. This is probably due, in part, to natural erosion activity and intensive industrial and recreational use.

STANDING STRUCTURES

The primary structure adjacent to the unit is the municipal pier. Although, the pier is technically outside of the unit's boundaries, it has a significant visual and functional effect on the unit. Originally constructed in 1904, it was reconstructed in 1914 and currently exists as 1800 foot structure.

ETHNOGRAPHIC AND HISTORICAL BACKGROUND

Southern California cultural traditions prior to 5000 B.C.E. are not well defined for Orange County and the specific unit.

By about 5,000 B.C., it appears that a relatively uniform cultural tradition existed on the coast from Santa Barbara south to San Diego. Most archaeologists call this subsistence pattern the Millingstone Horizon. This era centered around the collection of small, wild seeds and shellfish. The additive Campbell Tradition developed out of the Millingstone Horizon by about 3,000 B.C. in Santa Barbara, a little later in the Ventura area, and still later in parts of Los Angeles and Orange Counties. The Millingstone Tradition seems to have continued until 500-700 A.D. along the Orange and San Diego County coasts, when it was replaced by a cultural tradition identified by archaeologists as the last prehistoric time period.

The Millingstone Horizon is identified in part by large projectile points, the use of milling stones (mano/metate), and largely undifferentiated chip stone tool assemblage. The late prehistoric tradition has two tool phases. The early phase is marked by the introduction of small, triangular projectile points (desert side-notched points), addition of the mortar and pestle to the milling assemblage, shell beads, shellfish fish hooks, varied bone tools, so-called donut stones (use of which is not positively known), and a much broader array of ornamentation than the earlier Millingstone Horizon. The principal "late" prehistoric artifact addition is the manufacture and use of pottery. Both of these late traditions continue up to Hispanic contact in the latter part of the 17th and early part of the 18th centuries.

The primary people were of the Shoshonean linguistic group. The Gabrielinos were part of the Shoshonean group which inhabited the area.

Much of the information regarding the settlements and traditions of the Gabrielinos was recorded by Father Geronimo Boscana of the San Gabriel Mission. Although Cabrillo and Vizcaino noted smoke from numerous fires, they never landed their ships along the southern California coastline in this area. Instead, they sought refuge at Santa Catalina Island and the Channel Islands. Gaspar de Portola led his expedition through the general region in 1769, which introducted the first serious and long-term settlement of Euroamericans characterized by the missions.

It is estimated that approximately 5,000 Gabrielinos lived within the aforementioned territory at the time Portola arrived. The prominent village of the Gabrielinos was termed Puvunga which was located approximately 8 to 10 miles northwesterly of the unit. This site is now located within what is known as the Bixby Ranch in Long Beach.

The Gabrielinos had a fairly complex society with a diversified economy. Subsitence was characterized by exploitation of maritime resources including deep sea fish species and mammals. Additionally, Gabrielinos acted as significant traders between the groups which occupied the islands and inland regions. The Gabrielinos had an extensive religious and social fabric that essentially focused on a single diety--Chungichnish. Rites included dancing, fasting, animal sacrifice and week long observances. Father Boscana recorded the common practice of cremation which may explain, in part, the lack of a traditional necropolis--areas that normally yield detailed archaeological finds.

The Gabrielinos were passive in nature and accepted the European (missions) infiltration. The primary focus was the Mission San Gabriel located approximately 30 miles north of the unit. Johnston records that the Gabrielinos were devasted by European diseases due the lack of immunity.

Although, the Gabrielinos did not completely vanish, their numbers were severly reduced. The remaining Gabrielinos settled near Mission San Gabriel and became a functional part of the Mission's economy.

The historic use of the unit began with the land grant of Rancho Las Bolsas to Manuel Perez Nieto in 1784 by the Spanish Governor Pedro Fages. This grant covered 21 square miles and was used for cattle grazing.

Nieto died in 1804 and thirty years later, his grant was divided among heirs. In 1834, Mexican Governor Jose Figueroa granted the general area to Catarina Ruiz. In 1841, an area consisting of six square miles was termed Bolsa Chica and granted to Joaquin Ruiz.

Don Abel Stearns who had resided in Los Angeles since 1833 obtained ownership of Bolsa Chica and Las Bolsas in the mid 1850's. This acquisition allowed Stearns to become, the largest owner of land and cattle in southern California. Stearns died in 1877 and Stearns' successor, the Stearns Rancho Trust began to sell portions of the property.

The unit was part of an area called "Shell Beach" due to the large amount of bean clams. This beach included an area that rose sharply into bluffs that were subject to wave and tidal erosion. This area is essentially the subject unit. Inland from the bluffs was a mesa that was purchased by Colonel Robert Northam, a manager of the Stearns Rancho Trust.

In 1901, Philip Stanton formed a local syndicate and bought 1,500 acres of Rancho Las Bolsas from Robert Northam for the sum of $100,000. The syndicate organized the West Coast Land and Water Company and on a mesa above Shell Beach laid out streets and lots in a forty acre tract. In drilling a well for domestic water, considerable gas came out of the hole, much to the annoyance of the promoters. In August 1901, the first lots were placed on the market with prices ranging from $100, to $200, each. A number was given away to persons who would agree to build some kind of structure immediately. In 1902, Philip Stanton sold his interest in Pacific City to the Vail-Gates Group of Los Angeles.

Henry E. Huntington, who owned the Pacific Electric Railroad and was a principal stock holder in the Southern Pacific Lines, became interested in Pacific City. His "red cars" were already running to Long Beach and the Southern Pacific owned the rails extending to Newport Beach. Buying an interest in the West Coast Land and Water Co., he extended his red car line along the ocean front from Long Beach and electrified the old railroad line to Newport Beach. A wooden pier was built into the ocean and on the bluff a two-story frame hotel, the Huntington Inn, was erected. An extensive advertising campaign drew attention to Huntington Beach and a real estate boom developed. Lots that had sold for $200 a year before sky-rocketed to $43,000. More land was added to the original townsite. The Huntington Beach Company, comprised mostly of Angelenos, had acquired the remaining holdings. The company's first president, J. V. Vickers, had been a director of the West Coast Land and Water Co., when Stanton headed the syndicate.

The City of Huntington Beach was incorporated February 17, 1909, with Ed Manning as the first Mayor. The original townsite consisted of 3.57 square miles, with a population of 915. There were 542 registered voters.

From 1910 to 1920 the City maintained a slow growth rate. The Huntington Beach Co. operated a ranch raising food grains on some of 1,400 acres they owned. In 1918, they held public land auctions to stay out of debt.

In 1919, Standard Oil Company leased 500 acres of land from the Huntington Beach Co. The first oil well was drilled in what was then the northwest area of the City. This well was known as A-1 and was brought in during August, 1920, producing 91 barrels of oil a day. They continued to drill more wells on their lease and multitude of others moved in with hopes of finding a profitable oil well. Wells sprang up and in less than a month the town grew from 1,500 to 5,000 people.

On November 6, 1920, Standard Oil Co. brought in a significant well known as Bolsa Chica No. 1. An estimated 4,000,000 cubic feet of gas and 1742 barrels of oil were produced per day by this well alone. Standard Oil Co. shipped several hundred men from other fields into Huntington Beach to help contain the overflow of oil. Bolsa No. 1 proved that the Huntington Beach oil field was the most significant discovery and soon the population was over 7,000 persons. Areas as small as a City lot were leased and used for organizing oil corporations. Scores of them were formed and their stock put on the market. The old established oil companies continued to drill more wells.

In 1926, the area between 8th Street and 23rd Street, known as the town lot field, produced a second oil boom. The profits from oil were now available to the owners of these lots. Houses and other structures were moved for the purpose of obtaining oil.

In 1930, oil was discovered and produced from the tideland ocean pool utilizing the whipstock method. The development of this idea proved that oil from a known ocean pool lying off shore could be drilled form the upland by slant drilling, and in the process, preserve the beach and public recreation area. Currently, close to 500 whipstock wells produce approximately 10 million barrels of oil annually (1980). The wells within the unit are a part of this system.

The unit's other primarly utilization is recreation. Pacific Coast Highway was completed in 1925 and provided direct access to the unit. Other than further public improvements and the construction of an apartment complex along the north side of the pier, the unit has remained unchanged. The City of Huntington Beach has placed some riprap along the bluffs from Goldenwest Street to Bolsa Chica in order to prevent wave and tidal erosion.

ESTHETICS RESOURCES

The unit is a scenic resource comprised of several elements. The entire unit provides a panoramic perspective of the Pacific Ocean. Santa Catalina Island is located approximately 30 miles offshore and is visible much of the time. The unit's area between the municipal pier and Goldenwest Street is relatively flat with ample access to the water edge.

The area between Goldenwest Street and the unit's northerly boundary is characterized by bluffs with difficult access to the beach. This bluff area is not improved with any recreation facilities except with an asphalt path that is adjacent to Pacific Coast Highway. However, these bluffs provide vista points towards the ocean and along the coastline.

The ocean meterological characteristics provide a variety of scenic attributes. The surface is often calm and reflective. However, northern winter storms create an impetus for large surf during winter months. Sunsets along the unit's area are picturesque when the northerly coastline and Santa Catalina Island is silhouetted.

The bluffs that are within the unit have been subjected to tidal and wave erosion. The unit's area between Goldenwest Street and the northerly boundary has large amounts of riprap and concrete slabs placed between the water and the bluff. Reinforced steel bars, rusted pipes and miscellaneous concrete material is highly visible. This area of the unit has bluffs that are not improved for recreation purposes. The top of the bluffs are void of vegetation and evidence of erosion and soil breakdown is apparent. There are a series of oil pumps within fenced areas. Some of these areas have had pumps removed, yet the fencing and ancillary equipment remains. There is a service road that has an asphalt base that connects these oil pumps.

The unit area between the municipal pier and Goldenwest Street has an improved bluff top park. However, there is a series of oil pumps between the bluff and the beach area. A service road connects these pumps. There is a concrete wall that retains the bluff. This wall has been the object of graffiti. The surface of the wall has cracks and is in need of painting. There are overhead utility lines throughout this area. Additionally, there are portable toilets scattered along the service road.

RECREATION RESOURCES

The unit serves a local and regional recreation need. The unit has historically provided an area for recreation because of its accessibility. Access to the beach area at the northerly end of the unit is predicated upon the tide. At high tide the water reaches the bottom of the bluffs precluding any use of the beach area. The remaining of the unit's beaches have ample access.

Historically and currently, the unit has been utilized for general beach activities including swimming, surfing, fishing and other recreational activities. The City of Huntington Beach has installed a bluff top park from the pier to approximately Goldenwest Street. This park has not only enhanced the streetscape along Pacific Coast Highway, but has provided for safe bicycle and pedestrian circulation away from vehicular traffic.

The unit's activity can be characterized as destination oriented. That is, it is utilized for a series of recreational purposes because of the sand, water, and its general location. Both passive and active types of recreation characterize its usage. Essentially, it can (and does) accommodate large groups of people for a variety of purposes. The unit experiences intense activity and use during the summer months, specifically on weekends. The activity level drops noticeably during the autumn and winter seasons.

The unit has ample and direct access to Pacific Coast Highway and adjacent neighborhoods. There is on-street parking along all areas within the unit. This is further facilitated by pedestrian stairways between the pier and Goldenwest Street. There are no stairways between Goldenwest Street and the northerly boundary of the unit.

There are possible hazards associated with storm surf, primarily during the autumn and winter months. Riptides and undertows present a constant concern for swimmers and surfers. As previously mentioned, there is a degree of hazard associated with access down the bluff areas between Goldenwest Street and the northerly boundary of the unit.

RESOURCE INVENTORY FOR THE STATE BEACH GENERAL PLAN

SUBMITTED TO THE

CITY OF HUNTINGTON BEACH

JULY 30, 1987

Barrett Consulting Group Inc.

COSTA MESA, CALIFORNIA

STATE OF CALIFORNIA
DEPARTMENT OF PARKS AND RECREATION

STATE BEACH GENERAL PLAN
(CITY OF HUNTINGTON BEACH)
RESOURCE INVENTORY

by

CITY OF HUNTINGTON BEACH
and
BARRETT CONSULTING GROUP INC.

RESOURCE INVENTORY

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RESOURCE INVENTORY

INTRODUCTION

STATE BEACH GENERAL PLAN

(City of Huntington Beach)

July 1987

by

Barrett Consulting Group Inc.

PURPOSE

In January of 1987 the City of Huntington Beach assumed responsibility for a section of beach area from the State of California. This change in responsibility constituted a reclassification of an unit of the State Department of Parks and Recreation.

Pursuant to Public Resources Code Section 5002.1, "...an inventory of the unit's scenic, natural, and cultural features, including, but not limited to, ecological, archaeolgical, historical, and geological features..." shall be completed prior to the reclassificaiton of a unit within the state park system. The inventory has been prepared for the formal review and approval by the State Park and Recreation Commission.

It should be noted that the unit's size and configuration, and exposure to industrial development for approximately 70 years severely restricted the discovery and analysis of unique natural and archaeological elements. However, the unit was thoroughly researched through personal interviews, field reconnaissance and literature searches in order to provide a comprehensive resource document. It is further understood that this resource inventory will serve as base data for:

- for public information;
- for the development of resource management policy:
- for the development of resource management and protection programs;
- to serve as a reference for the clarification and solution of resource problems;
- to serve as background information for planning facilities in the park system;
- for assessment of environmental impacts;
- for development of interpretive programs; and
- to serve as background information for maintenance and operation

Additionally, this inventory was developed in a flexible format so that revision and periodic updating may be facilitated.

PROJECT DESCRIPTION

Currently, the project is known as the State Beach - City of Huntington Beach. It was formerly a portion of the Bolsa Chica State Beach. The unit is located between the Huntington Beach Municipal Pier and the City of Huntington Beach northerly

municipal boundaries. It is between Pacific Coast Highway and the Pacific Ocean. It is approximately 2.3 miles in length and encompasses approximately 100 acres.

The unit is within the County of Orange and lies between the Bolsa Chica State Beach and the City of Huntington Beach Municipal Beach. Nearby communities include Fountain Valley, Newport Beach, Westminster and Seal Beach. The most prominent geographical entity is the Pacific Ocean that is southerly and easterly adjacent to the unit.

Another prominent landmark is the Bolsa Chica Wetlands that are located to the northeast of the subject unit. The wetlands have been the subject of thorough analyses, development alternatives and state legislation. The unit is located within the Coastal Strip landscape province, and specifically in the zone designated for the area between the Mexico border and Point Concepcion. Figures I-1, I-2, and I-3 illustrate the unit's state wide, regional and specific locations, respectively. The unit has direct access to and from Pacific Coast Highway along its entire length. Pacific Coast Highway has on-street parking along the oceanward side. Additional parking lots are located near the municipal pier between the beach and Pacific Coast Highway. There are a series of major arterials that terminate into Pacific Coast Highway which directly facilitate traffic from population areas to the unit. These arterials include Warner Avenue, Goldenwest Street and Beach Boulevard. The nearest freeway is the San Diego Freeway (S.R. 405) which is approximately five (5) miles from the unit.

The unit is adjacent to the large population centers of Orange County and is approximately 30 to 40 minutes of driving time away from the Los Angeles area. Pacific Coast Highway is served by the Orange County Transit District (OCTD) and has several bus stops adjacent to the unit. Primarily, the unit is served by OCTD Routes No. 25 ad 29. The nearest airport is the John Wayne Airport (Orange County) which is located approximately 10 miles to the southwest. The Long Beach Airport is located approximately 15 miles northerly of the unit. The Los Angeles International Airport is located approximately 40 miles to the north.

INVENTORY STUDY AREA

As previously mentioned, the unit is relatively small (100 acres) and has a long, narrow configuration. It is primarily composed of a beach area and a bluff area. At the southerly end of the unit, the beach area occupies the majority of the unit. As the unit extends northward, the beach area diminishes and the bluff area increases in width. The unit is occupied by a pier side parking area, a multiple family development, a concession stand, a series of oil pumps and a bluff top park between the municipal pier and Goldenwest Street. From Goldenwest Street to the northerly municipal boundary, the unit is void of improvements with the exception of some oil pumps and an asphalt bicycle/pedestrian path.

The following sections of the inventory often incorporate a much larger geographical context than that area limited to the unit. Again, the unit's size and configuration precludes a focused analysis. Figure I-4 depicts the unit's boundaries and serves as a project base map.



FIGURE I-1

UNIT LOCATION (STATE)

BARRETT CONSULTING GROUP INC.
3184-K Airway Avenue Costa Mesa, CA 92626 714/545-4335 Telex No. 314583



FIGURE I-2

UNIT LOCATION (REGIONAL)

BARRETT CONSULTING GROUP INC.
3184-K Airway Avenue Costa Mesa, CA 92626 714/545-4335 Telex No. 314583

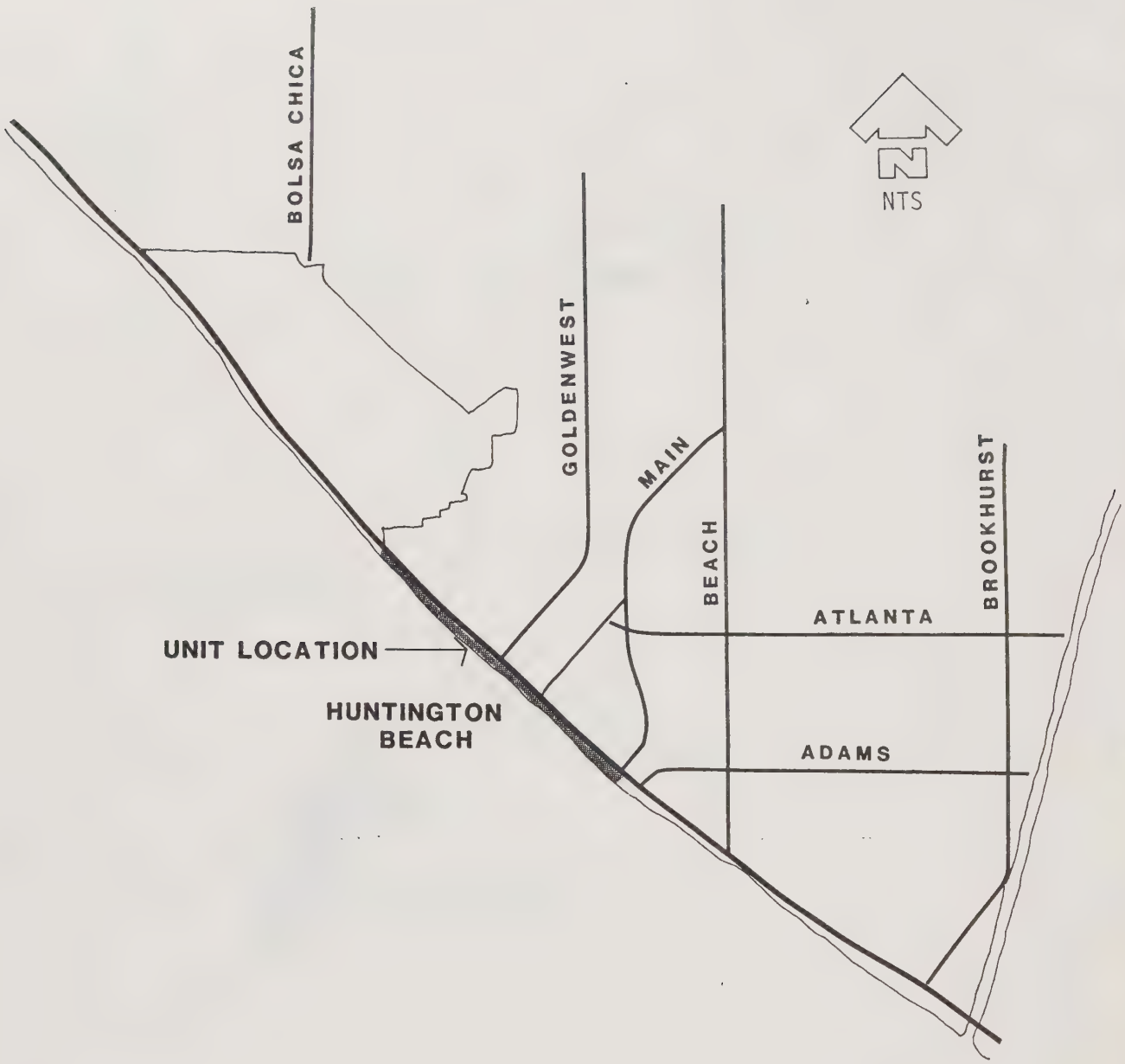


FIGURE I-3

UNIT LOCATION (SPECIFIC)

BARRETT CONSULTING GROUP INC.
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FIGURE I-4

PROJECT BASE MAP

BARRETT CONSULTING GROUP INC.

RESOURCE INVENTORY

TOPOGRAPHY

STATE BEACH GENERAL PLAN

(CITY OF HUNTINGTON BEACH)

July, 1987

by

Laurel K. Vedder

Staff Geologist

Barrett Consulting Group Inc.

TOPOGRAPHY

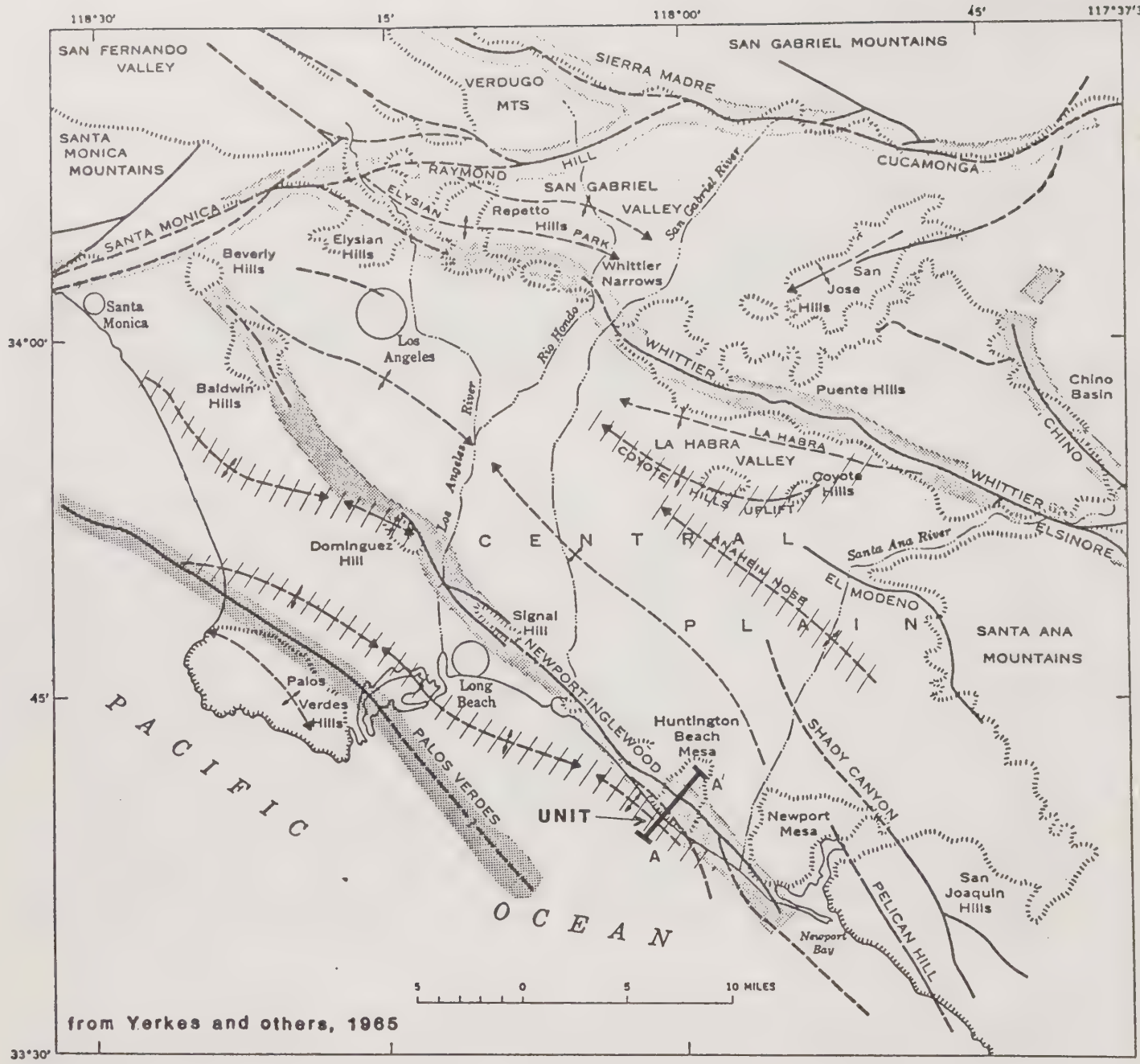
INTRODUCTION

Topographic information on the project area was obtained from a brief field reconnaissance of the site; U.S. Geological Survey Seal Beach and Newport Beach 7.5 min quadrangle maps; aerial photography at 100-foot and 40-foot scale (March, 1987); and a City of Huntington Beach, Department of Public Works survey of the Ordinary High Water Mark, from Main Street to a point 2.3 miles to the northwest.

REGIONAL SETTING

A variety of physiographic features comprise the coastal plain region of which the unit is a part (Figure T-1). These features include the bordering highlands of the Santa Ana Mountains, San Joaquin Hills, Puente Hills and Coyote Hills. The Santa Ana Mountains contain the highest peak fringing the coastal plain, Santiago Peak, which rises approximately 5,680 feet above sea level. The highlands areas are structural in origin, moderate to bold in relief and generally of mature form. The Coyote Hills, which border the coastal plain on the north, are inland foothills of moderate relief, locally planed and covered with a thin layer of alluvium. Alluvial fans, aggradational slopes of mild relief, have developed adjacent to the highlands and foothills. The most prominent fan system in the Orange County area abuts the Santa Ana Mountains and San Joaquin Hills and is called the Tustin Plain. The central lowland which comprises the area between the Newport-Inglewood zone and the Coyote Hills has been named the Downey Plain or Central Plain and is composed of the recent alluvial sediments.

A major feature controlling land forms in the coastal plain is the Newport-Inglewood structural zone, which consists of a series of interrelated faults and folds. The Newport-Inglewood structural zone is marked by a series of low northwest trending hills and uplifted plains which extend from the Santa Monica Mountains southeast to the unit area, where the trend heads offshore. The Signal Hill Uplift, Landing Hill, Bolsa Chica Mesa, Huntington Beach Mesa, and Newport Mesa are features attributed to folding along the structural zone. The hills and mesas of the Newport-Inglewood belt are separated by several gaps. The most significant for the purposes of this study are the 1.6-mile wide Bolsa Gap, situated northwest of the Huntington Beach Mesa, and Santa Ana Gap between the Huntington Beach and Newport Mesas, which has a width of 2.4 miles. Figure T-2 is a topographic map of the area showing the relative relief of the gaps and mesas.



EXPLANATION

WHITTIER

Fault or fault zone
Dashed where approximately located; queried where doubtful

Syncline
Dashed where approximately located

Anticline
Dashed where approximately located

A A'

Topographic Profile
Figure T-2

FIGURE T-1

LOS ANGELES BASIN PHYSIOGRAPHIC FEATURES

BARRETT CONSULTING GROUP INC.
3184-K Airway Avenue Costa Mesa, CA 92626 714/545-4335 Telex No. 314583

SITE DESCRIPTION

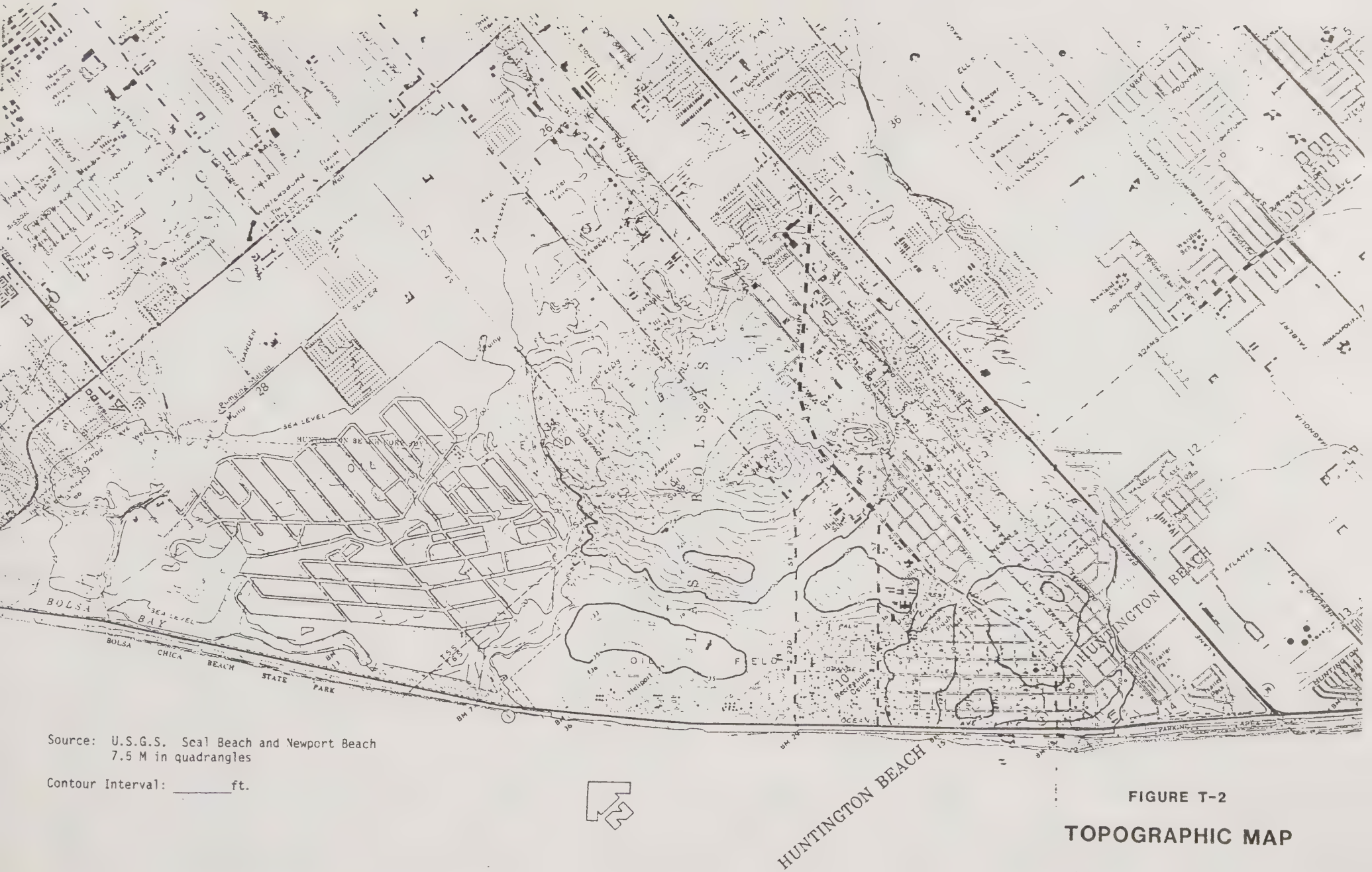
The site of the 100-acre beach park is near the southwestern onshore termination of the Newport-Inglewood structural zone. The park area extends from Pacific Coast Highway oceanward to the Ordinary High Water Mark. The local features affecting the topography of the park area are the Santa Ana Gap, Huntington Beach Mesa, the Bolsa Gap, and the shoreface itself. Elevations range between sea level and a maximum of 40 feet above sea level. The steepest elevations are encountered in the bluff area at the northwest end of the site (Figure T-2). Slopes range from 0 percent to nearly vertical. Figure T-3 is a topographic profile of Huntington Beach Mesa illustrating the relative changes in slope present in the unit area.

Bolsa Gap

The 1.6-mile wide Bolsa Gap lies northwest of the Huntington Beach Mesa. It is an ancient beheaded stream channel eroded across the Huntington Beach anticline and partially backfilled by basal sand and gravel deposits and overlain by alluvial, lagoonal and tidal marsh deposits. The general area is locally known for its peat beds and historic artesian wells and springs. The original Late Pleistocene surface of the Huntington Beach anticline was eroded to a depth of 210 feet below the crest of Huntington Beach Mesa, or about 70 feet below the present mean sea level, creating the gap. The channel and its associated sediments extend northestward approximately 6 miles before terminating near the City of Westminster where it is cut off by the western flank of the deeper trench of the Santa Ana Gap. The Bolsa Gap is believed to be the topographic expression of an earlier channel position of the Santa Ana River.

Huntington Beach Mesa

The Huntington Beach Mesa is a roughly rectangular elevated plain as illustrated on the topographic map of the Seal Beach 7.5 min. quad. The mesa extends inland approximately 4 miles and runs about 2.5 miles along the coast. Its southwestern edge faces the beach and is a sea cliff 30 to 40 feet high; it is bordered on the northwest and southwest by stream-cut bluffs of 70 and 45 feet, respectively. These bluffs diminish in size away from the coastline. The surface of the mesa consists of three inland dipping segments of distinct altitude and the northeastern margin of the mesa slopes beneath the Downey Plain. The segment of the mesa which borders the coast extends inland approximately 0.5 mile and terminates in a succession of small undrained depressions aligned parallel to the coast. Its surface is nearly horizontal and ranges between 30 and 40 feet above mean sea level. The central segment of the mesa begins approximately 1 to 1.25 miles inland from the coast; it is the highest segment and contains three small hills, the tallest of which stands 130 feet above mean sea level. The landward segment of the mesa slopes northeastward from an altitude of 75 feet above mean sea level to



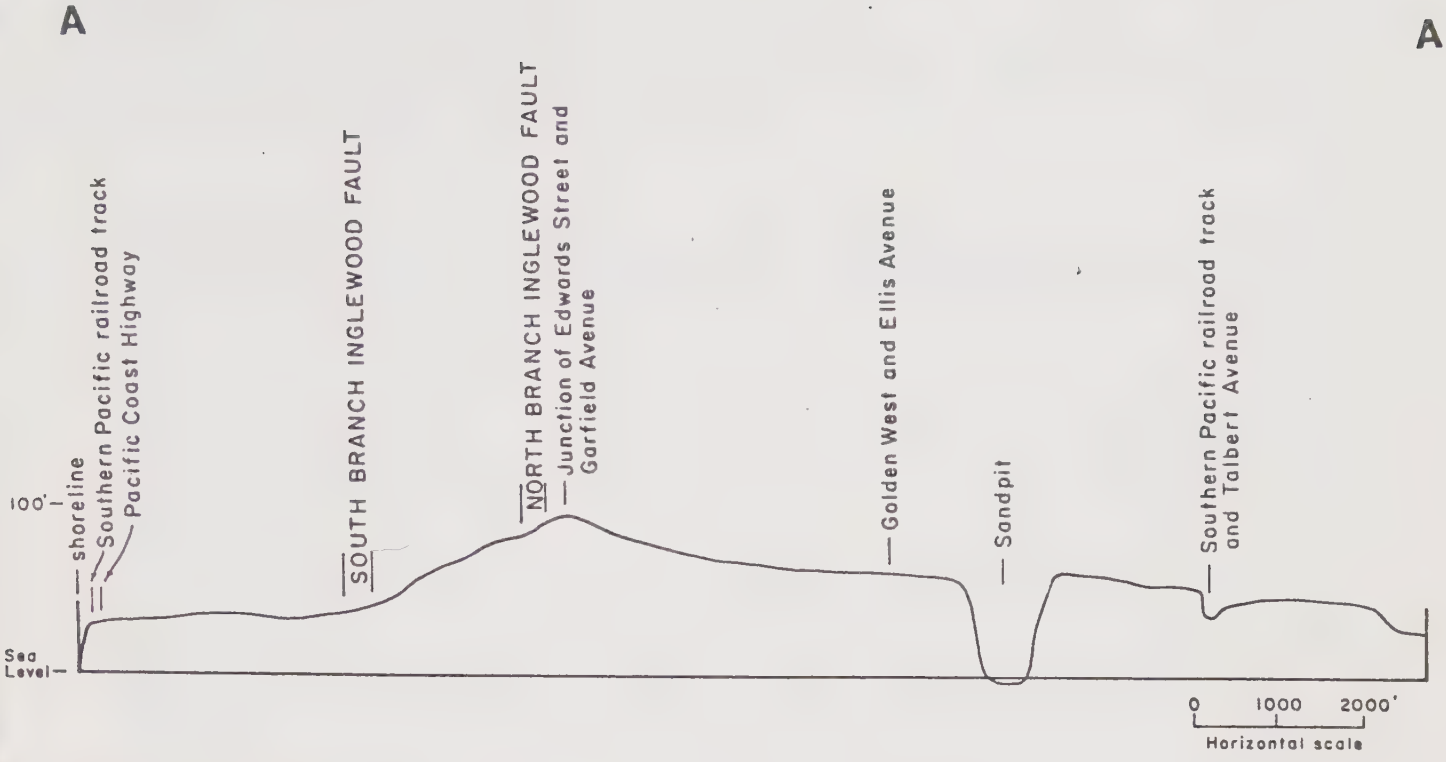
Source: U.S.G.S. Seal Beach and Newport Beach
7.5 M in quadrangles

Contour Interval: _____ft.

FIGURE T-2

TOPOGRAPHIC MAP

BARRETT CONSULTING GROUP INC.
3184 K Airway Avenue Costa Mesa, CA 92626 714/549-4335 Tetex No. 314583



Source: Barrows, A.G., 1974, California Division of Mines and Geology, Special Report 114

FIGURE T-3

TOPOGRAPHIC PROFILE OF HUNTINGTON BEACH MESA

BARRETT CONSULTING GROUP INC.
3184-K Airway Avenue Costa Mesa, CA 92626 714/545-4335 Telex No. 314583

about 25 feet and extends for 2.5 miles. This segment is dissected by several long gullies, the most extensive of which is 2 miles in length. The mesa is the surface expression of the Huntington Beach anticline, a series of folded strata thought to have been deformed by pressures along the Newport-Inglewood fault zone during Tertiary time.

Shoreface

The shoreface is an environment within which depositional processes are controlled by wave energy. The shoreface is subject to modification by storm processes. During a storm high amplitude waves can scour the bottom, suspending and then redepositing sand farther seaward as the storm wanes. Winter storms often result in a narrowing and lowering of the beach area. The foreshore or intertidal zone of the shoreface is usually marked by a change in slope, this is the zone affected by the swash runup occurring with each wave surge and backwash runoff between surges. The backshore environment, located landward of the intertidal zone, is characterized by subaerial, wind-generated deposits. The seaward limit of the backshore is indicated by the foreshore change in slope. This backshore area ranges from 0 to 800 feet in width within the project unit. Landward of the berm area, sand dunes may be developed and inland of the dunes naturally occurring lagoons and marshes may exist; however, the bluffs of the uplifted Huntington Beach Mesa prevent sand dune and marsh development within the project unit.

RECOMMENDATIONS

The unit's size and configuration does not afford detailed studies or boundary surveys. The area has been well documented and there appears to be no further need for future studies with respect to the City's long-range plans.

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U.S. Geological Survey. Seal Beach 7.5 min. Quadrangle

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RESOURCE INVENTORY

METEOROLOGY

STATE BEACH GENERAL PLAN

(CITY OF HUNTINGTON BEACH)

July, 1987

by

Laurel K Vedder

Staff Geologist

Barrett Consulting Group Inc.

INTRODUCTION

Information on the meteorology of the unit area was obtained primarily from Keith (1980). The profile of the South Coast Air Basin presented by Keith (1980) is a collection of data on several meteorological traits of the area including temperature, precipitation, relative humidity, wind, fog, insolation and air quality.

CLIMATE

General Description

The climate of this portion of the southern California coastline has been classified as Mediterranean, typical of coastal strips along the western shores of continents at lower latitudes. It is characterized by sparse rainfall, occurring predominantly in the winter months, and hot summers cooled locally by sea breezes. Southern California lies in the semi-permanent high pressure zone of the eastern Pacific Ocean. Despite occasionally heavy rainfall, the overall climate of the area is dry, 90 percent of the days being rain free each year.

During spring and summer, the predominant wind flow in coastal waters is from the northwest. The ocean flow resulting from this wind pattern is a drift of warm surface water seaward to the southwest. The surface water is then replaced by cold waters from below in a process termed "upwelling." The cold ocean surface produced as a result of upwelling underlies warm descending air on the eastern side of the high pressure system and produces, by cooling and turbulent mixing, a persistent layer of marine air based at the ocean surface. The top of the marine layer defines the base of a temperature inversion above which the air is warm and dry. This layering of warm air over cool air hinders the normal dispersal of pollutants produced in the area, and is a major contributor to the air quality problems of southern California. Temperature inversions are characteristic of the study area and usually dissipate by midday when the cooler marine air has been heated by the sun.

Temperature

Yearly average temperatures show little variation along the coast and range from 61°F to 65°F. The monthly mean maximum temperatures along the coast are only 12° higher during August than in January, and warm days occur in all seasons. The Pacific Ocean provides a moderating influence resulting in a cooler average summer temperature (67°F) and warmer average winter temperature (55°F) than inland areas. Table M-1 lists temperature data for Orange County.

TABLE M-1

ORANGE COUNTY

CLIMATOLOGICAL TEMPERATURE DATA

Average Temperature In Degrees F. By Month		El Toro	Laguna Beach	Los Alamitos	Newport Beach	Santa Ana	Tustin	Yorba Linda
Years of Record		14	27	12	29	43	46	44
Jan.	Max	63	64	64	63	68	66	66
	Min	44	44	42	45	39	40	41
Feb.	Max	65	65	65	63	68	67	68
	Min	45	45	44	47	42	42	42
Mar.	Max	67	66	66	65	71	70	71
	Min	46	46	46	49	44	43	43
Apr.	Max	69	68	68	66	73	72	73
	Min	50	50	50	52	48	47	47
May	Max	72	71	70	68	76	75	77
	Min	53	53	53	55	51	51	50
June	Max	76	73	73	70	79	80	82
	Min	56	56	57	58	55	55	54
July	Max	81	76	79	74	84	84	88
	Min	61	60	61	61	59	58	58
Aug.	Max	81	77	79	74	85	85	88
	Min	60	60	61	62	59	58	58
Sept.	Max	81	77	80	74	84	84	87
	Min	59	58	59	60	56	58	55
Oct.	Max	76	73	75	71	79	79	80
	Min	55	54	54	56	51	50	51
Nov.	Max	72	70	71	68	75	75	75
	Min	50	48	47	50	44	43	47
Dec.	Max	66	66	67	65	69	68	69
	Min	46	45	43	46	41	40	43
Annual	Max	72	70	71	68	76	75	77
	Min	52	52	51	53	49	49	49
Average		62	61	61	61	63	62	63
Record	Max	107	106	108	106	112	111	114
Record	Min	25	21	28	29	22	18	23

Average monthly ocean surface water temperatures range from 59°F to 65°F. Substantially lower sea surface temperatures exist in areas of upwelling compared to similar locations on the eastern shores of continents.

Fog

The presence of the marine layer results in moist air near the land surface along the coast. Over the ocean, the cool moist air results in a fog layer which recedes seaward during late morning and afternoon and moves onshore during late afternoon and evening. The fog encroaches onto the land more frequently in spring and summer months due to greater temperature variations between the ocean and land.

Relative Humidity

Relative humidy is a percentage reflecting the ratio between the amount of water existing in the air and the total water vapor the air could hold at a given temperature and pressure. Relative humidity in the coastal area fluctuates considerably as shown on Table M-2.

Precipitation

Rainfall in the coastal region is characterized by annual and seasonal variability; however, the rainy and dry seasons are constant. The rainy season extends from November through April, when greater than 90 percent of the annual rainfall occurs. Average rainfall as recorded at John Wayne Airport in Orange County is 11.41 inches per year. Table M-3 shows annual and averge monthly precipitation for stations in Orange County.

The southern California coast is located in the southern portion of the temperate zone and its winter storms are usually the result of southward movement of the storm track that normally follows the strong mid-latitude westerlies. Steady winter rains occur when low pressure systems move southward and stagnate off the coast. Thunderstorms are not an uncommon component of these winter storms and are initiated as a result of cold unstable air moving across the comparatively warm ocean surface. Intense rains also occur in association with southwesterly flows from the tropics that feed moist unstable air into the region.

Summer rainfall is the result of a southeasterly flow from the Gulf of Mexico which moves clockwise around a stationary high pressure system centered over Texas and New Mexico. During most of the summer period, the Pacific high pressure system dominates the weather pattern and blocks the westward movement of the Gulf of Mexico system. Moist tropical air from a source region off the Baja California coast of Mexico is known to produce cyclones in the late summer months. Cyclone occurrences which track northward may eventually affect southern California.

TABLE M-2

MONTHLY AND ANNUAL MEAN RELATIVE HUMIDITIES

Station	Mean Relative Humidities in Percent												
	Month												Annual
	J	F	M	A	M	J	J	A	S	O	N	D	
Los Angeles Intl. Airport	63	67	69	70	74	77	76	77	75	71	67	64	71
Long Beach Municipal Airport	63	65	65	65	68	69	68	67	68	66	66	66	66
Santa Ana	73	77	77	77	74	75	77	77	76	76	71	76	76
Los Alamitos	76	72	74	74	73	76	76	77	76	75	70	72	74
El Toro	69	67	70	73	71	73	73	75	72	71	62	63	70

TABLE M-3

AVERAGE RAINFALL - ORANGE COUNTY

Station Location	Monthly and Annual Rainfall[a] In Inches															
	PR[b]	J	F	M	A	M	J	J	A	S	O	N	D	AV	MAX[c]	MIN[c]
Brea	10	4.06	1.80	1.73	1.48	0.31	0.03	0.02	0.02	0.96	0.28	1.12	1.65	12.56	21.44	5.16
El Modena (Orange)	10	4.00	2.15	1.80	1.69	0.25	0.03	0.02	0.03	0.07	0.29	1.18	1.65	13.16	24.91	5.29
Fullerton	20	3.03	2.13	2.11	1.22	0.25	0.03	0.03	0.08	0.04	0.34	1.40	2.29	12.95	24.38	5.79
Laguna Beach	30	2.45	2.64	1.91	1.11	0.24	0.08	T	0.07	0.16	0.55	1.11	2.13	12.45	19.35	3.45
Newport	30	2.27	2.53	1.71	1.19	0.20	0.08	0.01	0.07	0.19	0.45	1.01	2.17	11.88	19.63	3.56
Santa Ana	53	2.49	2.83	2.31	1.08	0.35	0.03	0.01	0.05	0.17	0.58	1.06	2.67	13.67	25.35	4.83
Tustin	84	2.61	2.60	2.20	1.03	0.40	0.04	T	0.02	0.13	0.55	1.05	2.22	12.85	22.66	4.37
Yorba Linda	47	2.88	3.06	2.31	1.22	0.37	0.04	0.01	0.07	0.27	0.62	1.09	2.57	14.51	23.83	5.15

a) Annual Averages are Calendar Years

b) Period of Record

c) Reported Maximum and Minimum may not include entire period of record

d) Trace--less than 0.01 inches

Wind

During the rainy season, the region is subjected to winds associated with storms moving through the area from the northwest. During the dry season a patterned wind flow exists, characterized by daytime sea breezes and night land breezes. This daily reversal in wind flow is evident in other seasons, but is most persistent in summer. The wind flows are created by the pressure differences between the relatively cold ocean and the unevenly heated land surfce. Annual average wind speed and percentage direction for several sites in Orange County are shown on Table M-4. Extreme annual wind speeds for the Los Angeles basin are shown on Table M-5.

Santa Ana Winds. Five to ten times a year the region is subjected to strong winds locally termed "Santa Ana Winds." Santa Ana winds are downslope flows that are warmed by compression as they descend from the surrounding highland areas. The Santa Ana winds occur when a large high pressure system builds up over Nevada and Utah and spreads southward over the Mojave Desert. The clockwise wind circulation results in air being pushed southward over the San Gabriel and San Bernardino Mountains. Some of the strongest winds which occur each year are a result of Santa Ana conditions.

Catalina Eddy. A local wind that affects the unit and occurs more frequently than the Santa Ana winds is the "Catalina Eddy," a low level cyclonic flow centered over Santa Catalina Island. The island deflects northerly winds around its northern point, resulting in a counter-clockwise flow over the ocean to the southeast. On spring and summer days, some evidence of the eddy is apparent along the coast, especially in morning hours when the breeze is southerly from San Pedro southeastward along the Orange County coast. Often, afternoon westerly sea breezes overwhelm the eddy flow, however, strong eddies have been known to last for several days. These strong eddies usually form ahead of an approaching weak cold front and cause southerly sea breezes, the effect of which is noticeable as far south as San Diego.

Insolation

The Los Angeles area receives seventy-three percent of possible sunshine. This is approximately midway between the fifty percent received along the rainy northwest coast of California and the ninety-one percent received in the Mojave Desert at Yuma, Arizona. The percentage of cloud cover during daylight hours varies from forty-seven percent at Los Angeles International Airport to thirty-five percent in the mountain areas. The number of clear days increases with distance from the coast. The region receives less sunshine in the first six months of the year than in the latter six months due to a winter rainy season and a greater incidence of marine layers and thus an increase in fog during the spring.

TABLE M-4

ANNUAL AVERAGE WIND SPEED AND PERCENTAGE OF DIRECTION

	El Toro		La Habra		Los Alamitos		Santa Ana	
Dir.	%	Av. Speed	%	Av. Speed	%	Av. Speed	%	Av. Speed
N	2.7	4.8	3.5	1.6	4.6	4.3	2.5	2.2
NNE	2.5	6.6	1.5	2.6	3.0	4.5	0.8	4.0
NE	6.8	7.3	9.6	1.9	5.6	4.8	6.2	4.9
ENE	5.3	6.7	4.7	2.3	4.4	6.4	5.2	3.6
E	9.8	5.5	16.5	1.8	6.6	5.0	13.5	2.6
ESE	5.6	5.9	2.8	2.1	3.3	4.6	3.2	2.9
SE	6.7	6.4	5.7	2.1	4.0	4.8	5.9	2.6
SSE	4.9	7.0	1.9	3.2	3.4	5.5	2.2	4.1
S	6.2	7.2	9.4	3.6	8.3	6.1	8.1	5.3
SSW	3.5	7.1	5.7	5.2	11.1	7.6	9.0	6.8
SW	3.8	6.7	17.2	5.1	16.8	8.6	18.9	5.6
WSW	5.5	7.7	7.3	5.6	7.5	8.5	8.8	5.9
W	19.9	7.6	11.2	4.1	6.0	7.3	10.6	5.0
WNW	10.0	6.4	0.9	3.8	5.4	7.0	1.5	3.1
NW	4.6	5.4	1.7	1.6	6.8	5.6	3.1	2.6
NNW	2.2	4.7	0.3	2.1	3.3	4.8	0.6	2.7
(AV)		6.2		3.4		5.2		4.5

TABLE M-5

EXTREME ANNUAL WIND SPEEDS

Station	Years of Record	Peak Gusts[a] Low	Peak Gusts[a] High	Peak Gusts[a] Average[c]	Fastest Mile[b] Low	Fastest Mile[b] High	Fastest Mile[b] Average
El Toro	30	41	81	58			
Los Alamitos	21	40	62	49			
Los Angeles (LAX)	15	36	62	50			
Long Beach	18				18	44	34
Los Angeles (Downtown)	36				--	49	--
Los Angeles (LAX)	25				35	62	46

a) Miles Per Hour

b) The daily fastest speed, in miles per hour, of any "mile" of wind.

c) Average of highest gust each year for the period of record

Percentage of cloudiness and sunshine recorded at three stations within the Los Angeles basin is shown on Table M-6.

Climatic Record

Many of the original temperature observation stations in the region were initiated as a service to citrus growers. Other recording stations were established at airports. Stations with the longest periods of record in Orange County include El Toro, Laguna Beach, Los Alamitos, Newport Beach, Santa Ana, Tustin and Yorba Linda. Of these stations, the Newport Beach Station is closest to the unit location.

MICROCLIMATE

Stretches of barren sand and sea bluffs may alter breezes and temperatures within the unit. Bluffs may protect the backshore from night land breezes, but also serve to channel day time land breezes along their fronts. Reflection from sand may cause increased temperatures during sunny days along the backshore reaches of the beach. The size and configuration of the unit does not lend itself to a detailed microclimate evaluation.

Air Quality

The unit is located within the South Coast Air Basin. This basin consists of the metropolitan areas of Los Angeles, Orange, San Bernardino, and Riverside Counties. On most days the net wind flow is from west to east, which produces the effect of having source areas near the coast impacting receptor areas inland to the east.

The South Coast Air Basin comes under the jurisdiction of the South Coast Air Quality Management District. The closest air quality monitoring station is in the City of Costa Mesa. The major pollution sources in the region are automobile and truck exhaust and local industrial plants. The pollutants of primary concern are ozone, nitrogen dioxide, carbon monoxide and sulfur dioxide. High ozone days require sunshine, early morning stagnation, high surface temperatures, and strong, low, morning inversions which greatly restrict vertical mixing. High nitrogen dioxide days occur during autumn and winter, and during summer weather conditions of low inversions, limited mixing and stagnant windflow. Highest concentrations occur near high-density traffic sources. High carbon monoxide days are a result of strong winter surface inversions and light winds. Highest concentrations are found near the coast and valleys immediately inland. Again, concentrations are associated with peak traffic hours. High sulfur dioxide concentrations occur immediately downwind of sources.

TABLE M-6

CLOUDINESS, SUNSHINE - SOUTH COAST AIR BASIN

Station	Yrs. of Record	Element	Month												Annual
			J	F	M	A	M	J	J	A	S	O	N	D	Total/Average
Long Beach	21	Clouds[a] %	52	53	53	44	50	47	33	32	40	45	48	49	45%
	21	Days - Clear[b]	12	10	11	13	11	11	18	19	14	13	13	12	157 Days
		Partly Cloudy[c]	8	7	10	10	12	13	11	10	11	12	8	9	121 Days
		Cloudy[d]	11	11	10	7	8	6	2	2	5	6	9	10	87 Days
Los Angeles (Downtown)	34	Clouds %	44	47	47	47	49	43	27	26	30	38	37	42	40%
	34	Days - Clear	14	12	13	12	11	14	21	22	18	16	17	15	185 Days
		Partly Cloudy	8	7	9	10	12	10	9	8	9	9	7	8	106 Days
		Cloudy	9	9	9	8	8	6	1	1	3	6	6	8	74 Days
	32	Sunshine %	69	72	73	70	66	65	82	83	79	73	74	71	73%
Los Angeles (LAX)	30	Clouds %	52	51	51	48	52	52	40	39	42	45	45	47	47%
	43	Days - Clear	12	12	12	11	10	9	12	13	13	13	14	13	144 Days
		Partly Cloudy	8	5	8	9	11	11	13	12	10	10	8	8	113 Days
		Cloudy	11	11	11	10	10	10	6	6	7	8	8	10	108 Days

a) Sunrise to sunset
b) Zero to 0.3 of the sky obscured by clouds
c) 0.4 to 0.7 cloudiness
d) 0.8 to full cloud cover

Ozone is usually transported by winds from source areas along the coast to receptors along the base of the surrounding mountains. Offshore winds cause a more limited ozone transport with highest concentrations occurring in the western Los Angeles County area. Early morning northerly winds can cause ozone pollutants to be pushed into Orange County through Santa Ana Canyon, also of concern to the Huntington Beach area are east and northeasterly winds which blow pollutants out of the central basin areas into the adjacent ocean area

RECOMMENDATIONS

Meteorological information for the region that the unit is located within has been researched and is well documented. The only apparent need is the continual monitoring of the growing amount of point and non point pollution sources.

REFERENCES

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RESOURCE INVENTORY

HYDROLOGY

STATE BEACH GENERAL PLAN

(CITY OF HUNTINGTON BEACH)

July, 1987

by

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and
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HYDROLOGY

INTRODUCTION

Geologic aquifer descriptions were obtained from Poland and others (1956). Information on water quality and aquifer configuration was reported in PRC Toups (1983). Background data on hydrologic constraints to development was gathered from geotechnical reports, environmental impact reports and Orange County Water District reports and City of Huntington Beach General Plan elements.

The unit is located at the seaward edge of the coastal floodplain of Orange County in Hydrologic Subarea Y01.A1. The land surface consists of a broad alluvial floodplain yielding to coastal tidal marshes within 8,000 feet of the ocean, a barrier beach, and low hills and mesas.

WATERSHED DESCRIPTIONS

Surface Water

The subject unit faces the Pacific Ocean, the largest body of surface water on the planet. The nearest rivers are the San Gabriel River to the northwest and the Santa Ana River, which discharges into the ocean southeast of the unit through the Santa Ana Gap. Remnants of coastal marshes and wetlands, although not specifically within the unit, are evident in both Bolsa and Santa Ana Gaps.

Groundwater

Orange County's groundwater basin is managed and protected by the Orange County Water District. The large synclinal groundwater basin underlying the Coastal Plain of Orange County is divided into two areas, a pressured and a nonpressured area. The nonpressured, or forebay area, is located in the northeastern portion of the basin and supplies the recharge, both artificial and natural, to the entire aquifer system. The unit lies within that portion of the basin known as the pressured area, where groundwater is contained in a series of pressured aquifers.

When piezometric levels of discharging coastal aquifers are lowered below the critical head or pressure necessary to prevent saltwater encroachment or below the head of the semi-perched water of the uppermost aquifer, the flow of groundwater can be reversed. The usual southerly flow from the forebay area is replaced by a landward and downward hydraulic gradient which causes the coastal portion of the aquifers to be recharged by

seawater intrusion. Whether seawater intrusion occurs is dependent upon the elevation of the piezometric surface, which is determined by the balance between natural and artificial recharge and extraction within the entire basin.

The water-bearing sediments of the study area include Recent deposits, upper Pleistocene deposits of the Lakewood Formation, Lower Pleistocene deposits of the San Pedro Formation, and upper Pliocene deposits of the Pico formation (Figure H-1). The following is a list of the aquifers of the project area, described in succession from shallowest to deepest. A representative hydrogeologic cross section is included as Figure H-2

Semi-perched Zone

Semi-perched groundwater occurs in Recent deposits, including beach and dune sands, lagoonal, tidal marsh, alluvial and basal stream channel deposits. This groundwater is encountered at shallow depths, generally within 50 feet of the surface. It contains a range in concentration of dissolved solids which can be attributed to several factors, which include: 1) restricted mobility within the lenticular deposits of relatively low permeability, 2) the influence of the tidal prism, 3) solution of local evaporite deposits, and 4) the influx of return irrigation water, oil field brines, and other wastes. Because of these factors and limited recharge from the forebay area the Semi-perched water is usually saline or brackish in nature and is inferior for domestic and municipal use. Locally, the water may be freshened by artesian springs and in areas where the Semi-perched zone is in contact with the underlying aquifers.

Bolsa Aquifer

The Bolsa aquifer comprises the basal Recent channel deposits of Bolsa Gap. These deposits extend inland from the gap to the City of Westminster where they are truncated by the Talbert aquifer, the principal channel deposit of the Santa Ana River. Sediments comprising the Bolsa aquifer are fine to coarse sand, and granule to pebble gravel with occasional cobbles to 5 inches in diameter. Marine shells and thin lenses of silt, clay, and peat are lesser constituents. The aquifer ranges from 5 to 40 feet in thickness and unconformably overlies upper and lower Pleistocene deposits across the floor and along the edges of Bolsa Gap. The Alpha, Beta, Lambda, and Meadowlark aquifers outcrop beneath the Bolsa aquifer in certain areas.

Native fresh water of the Bolsa aquifer is predominantly calcium bicarbonate in chemical character, but ranges from calcium-sodium to sodium bicarbonate within 5,000 feet of the Newport-Inglewood structural zone. This change is caused by the influx of groundwater from the Meadowlark aquifer where the two zones are in hydraulic continuity.

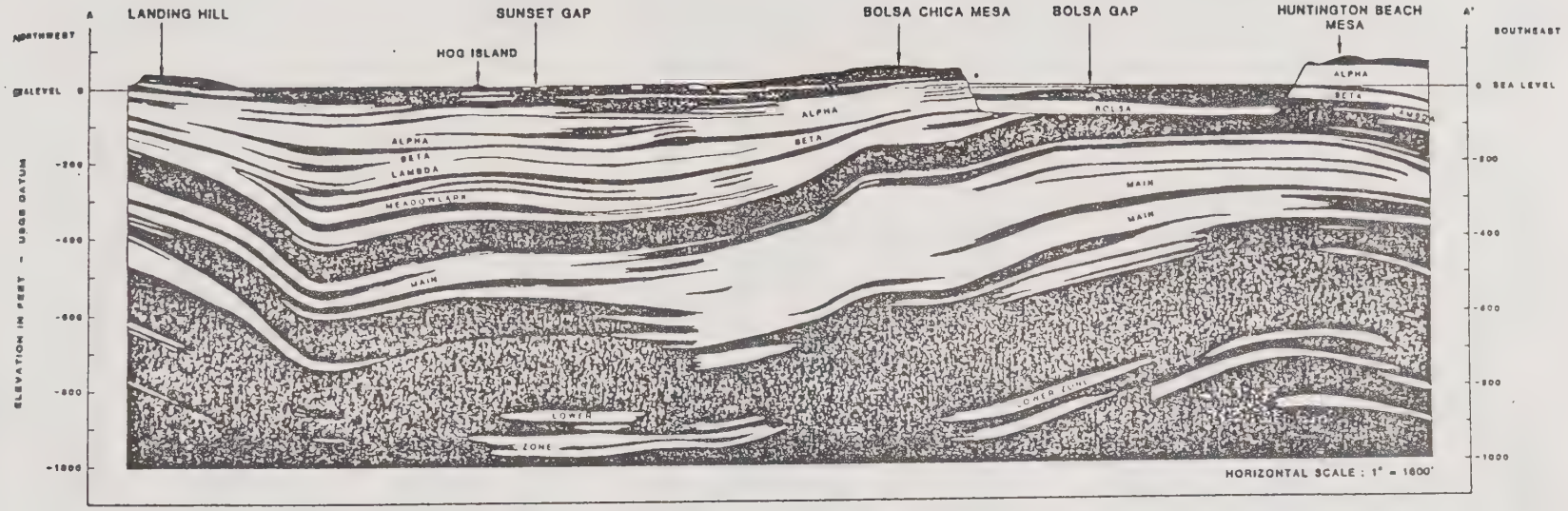
ERA	SYSTEM	SERIES	FORMATION	DOMINANT LITHOLOGY	APPROXIMATE THICKNESS (ft)	DEPOSITIONAL ENVIRONMENT
CENOZOIC	QUATERNARY	RECENT	Unnamed Beach Deposits	sand	0-30	Barrier Beach
		PLEISTOCENE	Lakewood	gravel, sand silt	0-400	Shallow Marine, Intertidal, and Non-marine
			San Pedro	sand, silt clay	600	Non-marine to Intertidal
	TERTIARY	PLIOCENE	"Pico"	sand, silt clay	1500	Non-marine to Marine Shelf
			Fernando			
			"Repetto"			Marine Slope to Basin
		MIOCENE	Puente	sand, silt clay	4500	Marine Slope Basin
			Topanga	ss, sltst, shale, cgl	6430	Marine Shelf to Intertidal
		OLIGOCENE		Glaucophane Schist	Unknown	Marine (metamorphic)
		EOCENE				
		PALEOCENE				
MESOZOIC						

FIGURE H-1

STRATIGRAPHIC COLUMN

HUNTINGTON BEACH AREA, CA

BARRETT CONSULTING GROUP INC.
3184-K Airway Avenue Costa Mesa, CA 92626 714/545-4335 Telex No. 314583



SOURCE: PRC TOUPS, 1983

FIGURE H-2

REPRESENTATIVE HYDROGEOLOGIC CROSS SECTION

BARRETT CONSULTING GROUP INC.
3184-K Airway Avenue Costa Mesa, CA 92626 714/545-4335 Telex No 314583

Talbert Aquifer

The Recent age sediments which fill the Santa Ana Gap consist of a lower member of permeable sand and gravel and an upper member of relatively impermeable silt and clay. The permeable member, the Talbert aquifer, is approximately 75 feet thick in the west and central part of the gap, thinning to about 50 feet in the east. The Talbert aquifer extends from offshore to the forebay area at the mouth of Santa Ana Canyon. The Talbert aquifer is in hydraulic continuity with the upper Pleistocene Alpha, Beta, and Lambda aquifers. The Talbert aquifer crosses over the Newport-Inglewood structural zone and affords a pathway for seawater incursion inland.

Upper Pleistocene Semi-Perched Zone

The Upper Pleistocene Lakewood Formation is differentiated into an upper Semi-perched zone and three interconnected aquifers and comfining beds. The Semi-perched zone is irregularly distributed throughout the area, except in the gaps, where it has been stripped away by erosion. The Semi-perched zone generally includes one to two permeable beds ranging from 1 to 20 feet thick, separated by silt and clay. Locally, the fine-grained materials are absent and the aquifer reaches a thickness of 55 feet. At Huntington Beach Mesa, oil field brines, oil refinery wastes and brackish water have percolated downward into the Semi-perched zone which, at this locality, directly overlies the Alpha aquifer of the Lakewood Formation.

Alpha Aquifer

The Alpha aquifer is the uppermost Pleistocene water-bearing zone containing developed water wells. In the seaward two-thirds of the Bolsa Gap, the aquifer is largely stripped away by erosion, elsewhere it is continuous. Where it is exposed in the sea cliffs of Huntington Beach Mesa, the aquifer is composed of fine to coarse sand and cross-bedded pebbly sand and gravel with some cobbles up to 6 inches in diameter. The aquifer ranges in thickness from a thin, erosional edge in Bolsa Gap to 110 feet thick, but averages 60 to 80 feet in thickness. The aquifer conformably overlies a marine silt and clay confining bed of 10 to 25 feet in thickness. Where this bed thins and pinches out across anticlinal folds, the Alpha and Beta aquifers merge and are difficult to differentiate.

Beta Aquifer

Except where eroded in Bolsa Gap, the Beta aquifer is for the most part continuous throughout the area. The aquifer is composed of medium to coarse sand and granule to cobble gravel. Silt and clay occur as thin interbeds. The aquifer reaches thicknesses of up to 80 feet, but on the average is 40 to 50 feet thick and is encountered 35 feet below sea level across the Huntington Beach anticline. The aquifer normally overlies a

marine silt and clay confining bed, however, inland from the Newport-Inglewood fault zone this bed thins and pinches out and the Beta and underlying Lambda aquifers form a single, merged zone.

Lamdba Aquifer

The Lambda aquifer is fairly consistent except where eroded in the Bolsa Gap area. The aquifer is composed of fossiliferous fine to coarse sand with granule to pebble gravel and interbeds of silt and clay. The aquifer varies in texture within the area becoming finer grained away from the Newport-Inglewood structural zone. The aquifer reaches a maximum thickness of 90 feet, but usually ranges from 30 to 50 feet in thickness. It thins across the Newport-Inglewood structural zone to 10 to 20 feet over the Huntington Beach anticline. The base of the aquifer reaches an upper elevation of 70 feet below mean sea level in Bolsa Gap. The Lambda aquifer conformably overlies a marine silt and clay bed of the San Pedro Formation, however beneath Bolsa Gap the marine silt and clay has been eroded and the Lambda aquifer overlies the Meadowlark aquifer of the San Pedro Formation directly.

Meadowlark Aquifer

The lower Pleistocene marine deposits of the San Pedro Formation contain three principal aquifers, the uppermost water-bearing beds are collectively known as the Meadowlark aquifer. The Meadowlark aquifer is continuous throughout the area with the exception of an eroded portion in the vicinity of Bolsa Gap. The aquifer consists of fossiliferous fine to coarse silty sand and fine gravel. Interbeds of silt and clay up to 25 feet thick commonly separate the aquifer into two or three zones. The lower portion of the aquifer is locally fine to medium silty sand and seldom is developed to wells. The aquifer ranges up to 120 feet in thickness, and the base of the aquifer lies 80 feet below mean sea level at its highest elevation near Bolsa Gap. The aquifer overlies a zone of silt and clay containing stringers of sand which grade locally into gravel.

Main Aquifer

The Main aquifer is the principal water-bearing zone penetrated by wells along the seaward perimeter of the Orange County coastal plain. The aquifer is continuous except in the Santa Ana Gap area and consists of fossiliferous beds of medium to coarse sand and gravel, fine to medium sand and silt and clay. Coarse grained sediments commonly occur in the upper portion of the aquifer, but beneath Huntington Beach Mesa the upper beds are fine silty sand or silt and clay. The aquifer varies in thickness along the Newport-Inglewood structural zone from a maximum of 365 feet in Bolsa Gap to 95 feet inland from the structural zone. The aquifer ranges from 150 to 250 feet in thickness and its base reaches its highest elevation at 350 feet

below mean sea level across the axis of the Huntington Beach anticline. The aquifer conformably overlies a confining zone of silt and clay with thin stringers of fine to medium silty and gravelly sand.

Lower Zone

Fine to coarse sand and gravel deposits with interbedded silt and clay occur locally at or near the base of the San Pedro Fromation from 150 to 350 feet below the Main aquifer. The beds are discontinuous along the Newport-Inglewood structural zone, where they range in thickness from 5 to 120 feet.

Upper Pliocene Deposits

Although not locally developed as a water supply, permeable beds of the upper Pico formation do contain fresh groundwater. These beds occur throughout the area, at the crest of the Huntington Beach anticlinal fold, they lie between 750 and 1780 feet below sea level and are up to 1000 feet thick. The deposits are composed of partially consolidated gravel, sand, silt and clay of marine origin.

Monitoring Wells

Twenty-five monitoring wells are currently in the forebay area of the coastal plain. The wells are perforated at specific depths to monitor conditions within a particular aquifer. Water levels and water samples for analysis are routinely obtained from the monitoring wells.

CONSTRAINTS

Flood Prone Areas

The unit incorporates the beach shoreface and bluffs of the Huntington Beach Mesa from Pacific Coast Highway to the mean high tide or ordinary highwater mark. Flooding resulting from storm waves or tsunamis may occur along the coast; however freshwater flooding hazards are limited to the Bolsa and Santa Ana Gap areas which flank the Huntington Beach Mesa to the northwest and southeast respectively.the Bolsa and Santa Ana Gap areas which flank the Huntington Beach Mesa to the northwest and southeast respectively. Flood water surface elevations to depths of up to 11 feet above mean sea level could occur in these areas.

High Water Table

A high water table exists within the unit due to its proximity to the Pacific Ocean. Depth to near-surface water is 3 to 5 feet throughout the unit as depicted on Figure H-3. The depth to the groundwater table, whether saline or fresh, is of particular geotechnical concern to the Huntington Beach area. Foundation design and septic system design must take into account the high water table.



Source: State of California
Department of Water Resources

FIGURE H-3

DEPTH TO WATER TABLE (FT)

BARRETT CONSULTING GROUP INC.

Water Quality

Native fresh waters of the Alpha, Beta, and Lambda aquifers are typically calcium bicarbonate to calcium-sodium bicarbonate in chemical character, but range to sodium bicarbonate within the Lambda aquifer. A general increase in calcium occurs areally toward mergence of these Pleistocene aquifers with the Bolsa aquifer, due to the influx of groundwater from that aquifer.

Seaward of the Newport-Inglewood fault, groundwaters native to the upper Pleistocene aquifers are predominantly saline, and are therefore inferior for domestic and municipal use. The origin of these saline groundwaters is attributed to the partial or nearly complete reentrance of seawater into the aquifers after the barrier effects of the Newport-Inglewood fault zone had been created.

Waters of the Meadowlark aquifer, the Main aquifer, and the Lower Zone are sodium bicarbonate in chemical character and are soft to very soft. In and near areas of hydraulic continuity with overlying aquifers, water of the Meadowlark aquifer is altered to sodium-calcium or calcium-sodium bicarbonate in chemical character and is moderately hard.

Waters of the Main aquifer and the Lower Zone are characterized by a hydrogen sulfide odor and an amber color. Except for these objectionable features, which can be removed by treatment, the waters are excellent for domestic and municipal use.

Seaward of the Newport-Inglewood structural zone groundwaters native to the lower Pleistocene aquifers are predominantly brackish to saline, are sodium chloride in chemical character, and are unsuitable for domestic, municipal, and irrigation uses. They are a blend of freshwater and seawater which entered the aquifers after the barrier effects of the fault zone were created.

The main contributors to the decline of water quality in the unit area are stormwater runoff, oil production outfalls, oil spills and seawater intrusion into groundwater.

The areas of concern with respect to saltwater intrusion in Huntington Beach are the gaps between the coastal mesas. Seawater intrusion was first observed near the coast in the Santa Ana Gap during the early 1930's in municipal supply wells of Newport Beach and Laguna Beach County Water District. By the middle 1940's the intrusion had progressed inland approximately 1 mile and by 1963 had encroached 3 miles inland. Injection facilities were completed in 1975 in the inland portion of Santa Ana Gap to protect groundwater quality in the area.

Coastal waters are subject to pollutants arising from fertilizers, pesticides, vehicle hydrocarbons, greases, oil, rubber, plastics, asbestos, paint and metal fragments, bacterial

organisms and coarse litter, all of which can enter the coastal waters through storm drains, flood control channels, and outfall pipelines relating to sanitary districts, Southern California Edison and oil companies. The oil production activities of the subject unit result in clays, brines and oil residue. Runoff from oil well and tank sites is a potential water pollution source. Despite containment systems, contaminated runoff does leave the oil sites to collect in storm drains and natural basins. Oil production activities have been designed to protect the fresh groundwater resources of the area. An offshore tanker unloading platform and three offshore oil production platforms are also potential oil spill sources. The protection of water quality and enforcement of water quality standards is conducted by regional, state and federal agencies.

Monitoring of water quality in Huntington Beach waters is carried out by the Orange County Environmental Management Agency which monitors the temperature, acidity, dissolved oxygen content, heavy metals content and other physical parameters of waters. The Orange County Sanitation District maintains a testing operation to monitor effluent as it leaves the sanitation plant and at its outfall. Ocean waters are periodically tested in the vicinity of the outfall. The Orange County Human Services Agency monitors bacteria levels off of the City's beaches. It also tests mussels taken from the Municipal Pier for contaminants. National Pollutant Discharge Elimination System (NPDES) permits are required for every wastewater outfall, NPDES permits are administered by the local Regional Water Quality Control Board.

Pursuant to daily monitoring reports maintained by the California Regional Water Quality Control Board (RWQCB), the water adjacent to the unit does ot contain excessive pollutants. These reports are on file for public review in the RWQCB's Riverside office.

Water Quantity

Southern California, including the City's coastal zone, is a semi-arid region and adequate water supply depends upon outside or imported sources of water. Much of the water supply fo the City comes from the Colorado River and from northern California (via the California Aqueduct). Water from these two sources is bought by the Orange County Water District and spread in basins to replenish groundwater reserves in the area.

The City receives approximately 70 percent of its water supply from this groundwater reserve. The City acquires the remaining 25 percent of its water supply directly from the Metropolitan Water District (MWD) via the West Orange County Water District Facilities. MWD imports water from both the Colorado River and northern California.

The City water system includes eight wells, three reservoirs, booster pumps, a network of water lines for distribution, and emergency storage in the San Joaquin Reservoir.

Eight wells varing in depth from 250 to 900 feet presently provide the City with water. None of the eight wells in operation are located in the coastal zone, and, specifically, within the subject unit.

The City has determined that current supplies are adequate with the possibility of drilling additional wells outside of the coastal zone to service future needs.

The water is transmitted from existing wells and reservoirs to the coastal zone via pipeline. Currently, a main transmission line is scheduled to be located in Goldenwest Street, from Yorktown Avenue to Pacific Coast Highway which will directly serve the unit.

RECOMMENDATION

The issue of water supply and quality is of primary importance to the Orange County area. Therefore, intensive research and studies have been completed and are on file with the City of Huntington Beach for public review. Additionally, conservation methods have been developed and set forth into policies that comprise, in part, the City of Huntington Beach General Plan.

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RESOURCE INVENTORY

GEOLOGY

STATE BEACH GENERAL PLAN

(CITY OF HUNTINGTON BEACH)

July, 1987

By

Laurel K. Vedder

Staff Geologist

Barrett Consulting Group Inc.

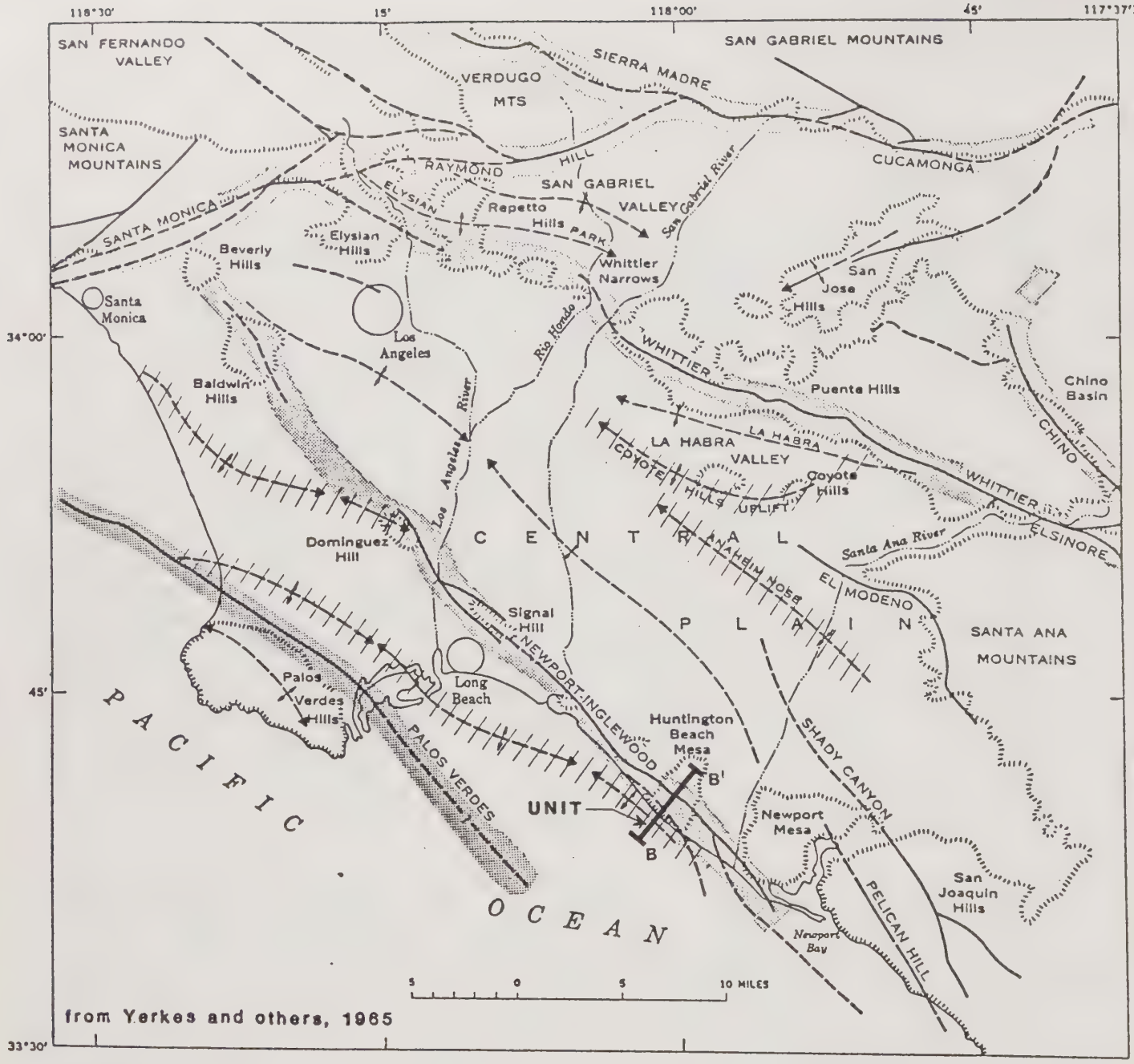
GEOLOGY

INTRODUCTION

The subject unit lies near the northwestern flank of the Peninsular Ranges geomorphic province of southern California. The Peninsular Ranges province includes the Los Angeles structural basin, the offshore area known as the Continental Borderland, the Santa Ana Mountains and the rest of the Peninsular Ranges to the south, and extends from near latitude 34° North in the Los Angeles basin to the tip of the Baja California peninsula. Characterized by elongated northwest-trending mountain ridges separated by straight-sided sediment-floored valleys, the province has been uplifted, tilted seaward and sliced longitudinally into subparallel blocks by young, steeply dipping faults. These northwest to west-northwest trending fault zones separate large elongate blocks of different structural elevation which are terminated at their northwestern margin by the east-west trending structures of the Transverse Ranges province. The major faults appear to be late Cenozoic in age, and many are seismically active. The Newport-Inglewood structural zone is one of the major northwest trending structural elements of the northern portion of the Peninsular Ranges province. The onshore extent of the zone runs from the mouth of the Santa Ana River, just south of the subject unit, northwest to Beverly Hills. A map showing the major structural elements of the region is included as Figure G-1. Figure G-2 is a regional geologic map of the coastal plain and contiguous areas.

The unit lies within the regional structural trough known as the Los Angeles basin. Non-marine to bathyal marine upper Cretaceous, Tertiary and Quaternary sediments deposited on crystalline rocks of both oceanic and continental basement compose the stratigraphic sequence of the basin. Strata consist primarily of conglomerates, sandstones, sands, shales, and mudstones. Sediments were derived from the north and east except during middle Miocene time when oceanic highlands are thought to have shed clastics from the south. The basin, which is bounded on the north by the San Gabriel and San Bernardino Mountains, on the south by the Pacific Ocean, and on the west and the east by the Santa Ana Mountains and San Joaquin Hills, is approximately 45 miles wide by 65 miles long. Geophysical studies show the total depth of the basin to be over 30,000 feet.

References that describe the stratigraphy of the Los Angeles basin and surrounding areas include those by Jahns (1954), Yerkes and others (1965) and Schoellhamer and others (1981). Recent interpretations of the structures of the Newport-Inglewood fault zone are discussed by Harding (1973).



EXPLANATION

WHITTIER

Fault or fault zone
Dashed where approximately located; queried where doubtful

Syncline
Dashed where approximately located

Anticline
Dashed where approximately located

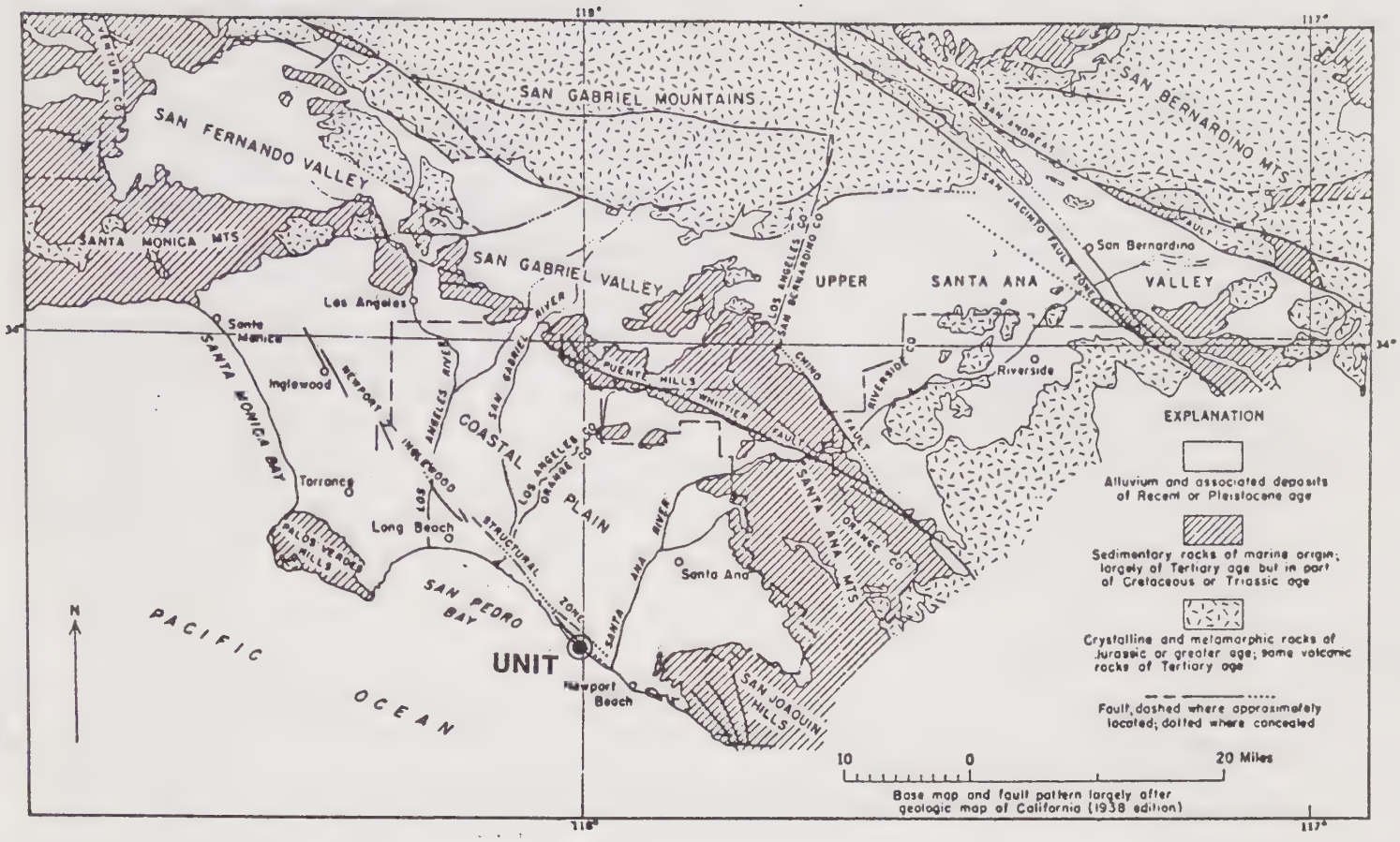
B B'

Cross section shown on Figure G-5

FIGURE G-1

REGIONAL STRUCTURAL ELEMENTS AND CROSS SECTION LOCATION MAP

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Source: Orange County Water District,
Talbert Barrier Status Report, 1982.

FIGURE G-2

REGIONAL GEOLOGIC MAP OF THE COASTAL PLAIN AND CONTIGUOUS AREAS

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LITHOLOGY

The following is a brief description of the geologic formations which underlie the project unit, beginning with the oldest formations first. A stratigraphic column is shown in Figure G-3.

Catalina Schist

The crystalline basement rock, the Catalina Schist, which composes the floor of the basin beneath the study area is thought to be of oceanic rather than of continental origin. The Catalina Schist is an intensely foliated metamorphic crystalline rock found at depths of up to 15,000 feet. Neither the age nor the stratigraphic position of the Catalina Schist is known; the oldest known overlying rocks are middle Miocene rocks of the Topanga Formation. Where oil wells have penetrated the Catalina Schist near the northerly extension of the Newport-Inglewood zone, glaucophane and lawsonite schists, characteristic of the rock formation are absent, and garnet-bearing schists, serpentinite, metagabbro, and metavolcanic rocks occur. The foliated schists of the Catalina Schist have been tentatively correlated with the Jurassic to early Cretaceous Franciscan Formation.

Topanga Formation

Beneath the study area the Catalina Schist is overlain by the middle Miocene Topanga Formation. Recent cross sections across the area show the Topanga Formation to be 6,430 feet thick. The Topanga Formation, where penetrated in the subsurface by oil wells, consists of an alternating sequence of gray, medium- to coarse-grained sandstone interbedded with gray siltstone and sandy siltstone. Conglomerate beds occur sporadically throughout the section. Dark-colored siltstone and hard mudstone are also present. Fossil molluscan faunas typical of middle Miocene assemblages throughout southern California are locally abundant in the formation, which is thought to have been deposited in a shallow marine environment. An erosional unconformity divides the Topanga Formation from the younger siltstones of the Puente Formation.

Puente Formation

The Puente Formation consists of a series of sands, silts and clays of late Miocene age. The fine clastics of the Puente Formation were deposited in a marine slope to basin environment and reach a thickness of approximately 4,500 feet beneath the project unit. Fish bones and scales, abundant foraminifera, and local concentrations of phosphatic nodules and small pyrite crystals are present. The lowest portion on the formation consists of hard, dark-gray to black siltstone and silty shale. Bedding varies from paper-thin laminations to massive beds up to three feet in thickness. The bedding commonly is accentuated by laminae and beds of fine- to coarse-grained gray feldspathic sandstone.

ERA	SYSTEM	SERIES	FORMATION	DOMINANT LITHOLOGY	APPROXIMATE THICKNESS (ft)	DEPOSITIONAL ENVIRONMENT
CENOZOIC	QUATERNARY	RECENT	Unnamed Beach Deposits	sand	0-30	Barrier Beach
		PLEISTOCENE	Lakewood	gravel, sand silt	0-400	Shallow Marine, Intertidal, and Non-marine
			San Pedro	sand, silt clay	600	Non-marine to Intertidal
	TERTIARY	PLIOCENE	"Pico"	sand, silt clay	1500	Non-marine to Marine Shelf
			Fernando			
			"Repetto"			Marine Slope to Basin
		MIOCENE	Puente	sand, silt clay	4500	Marine Slope Basin
			Topanga	ss, sltst, shale, cgl	6430	Marine Shelf to Intertidal
		OLIGOCENE				
		EOCENE				
		PALEOCENE				
MESOZOIC				Glaucophane Schist	Unknown	Marine (metamorphic)

FIGURE G-3

STRATIGRAPHIC COLUMN

HUNTINGTON BEACH AREA, CA

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Fernando Formation

Pliocene strata informally known as the Repetto and Pico formations have been redefined as the Fernando Formation. In the subsurface, the lower portion of the formation consists of greenish-gray micaceous siltstone, sandy siltstone, fine-grained sandstone and varying amounts of interbedded gray medium- to coarse-grained sandstone. Foraminifera from the lower part of the formation suggest an Early Pliocene age and marine slope or basin deposition for the basal part of the formation. The upper portion of the formation, known as the Pico formation in the subsurface, is composed of an alternating sequence of sandstone, conglomerate and micaceous siltstone. Remains of mollusks and foraminifera indicate shallow marine deposition in Late Pliocene time. The Fernando Formation reaches a thickness of 1,500 feet beneath the project unit and is unconformably overlain by the lower Pleistocene San Pedro Formation.

San Pedro Formation

Shallow marine deposits of the lower Pleistocene San Pedro Formation underlie upper Pleistocene and Recent formations throughout the area. The San Pedro Formation reaches a maximum thickness of about 1,050 feet. The formation is approximately 600 feet thick beneath Huntington Beach Mesa due to thinning and erosion across the anticlinal fold. Exposed in limited outcrops at the margins of the Huntington Beach Mesa, the San Pedro Formation is differentiated from the ovelying Lakewood Formation by a characteristic assemblage of foraminifera. It consists of silt, clay, sand and gravel, deposited predominantly in shallow marine environments in the unit area, but also including intertidal and lagoonal deposits.

Lakewood Formation

The Lakewood Formation includes deposits informally known as the Terrace Cover, Palos Verdes Sand and unnamed upper Pleistocene deposits and is exposed at the surface on the Huntington Beach Mesa. The Lakewood Formation consists of shallow marine, intertidal, and continental deposits ranging in thickness from an erosional edge in Bolsa Gap to a probable maximum thickness of 400 feet inland. The upper beds of the Lakewood Formation are exposed across the hills and mesas of the Newport-Inglewood structural zone and occur beneath the Recent deposits of Bolsa and Santa Ana Gaps. The upper Pleistocene Lakewood Formation has been extensively eroded across the Huntington Beach anticline and is stripped away across the fold crest. The Lakewood Formation lies conformably upon the lower Pleistocene San Pedro Formation inland, but across the Huntington Beach anticline, the contact is one of slight unconformity. The Lakewood Formation is distinguishable by its commonly oxidized state and consists of reddish-brown sand and silt interbeded by fossiliferous sands and gravels. The sands of the Lakewood Formation are locally crowded with marine mollusks.

Recent Deposits

Recent deposits of the project area include alluvial gravels, sands and silts; marsh deposits and peat beds; and beach sands. The alluvial deposits of Recent age consist primarily of sand, gravel silt and some clay. Lenses of coarse sand and gravel are found in the channel deposits of major streams which flowed through the Bolsa and Santa Ana Gaps. Fine sands, silts and clay are flood-plain deposits carried into the interstream areas during flooding. Near the coast and within the coastal bordering reaches of the gaps, tidal marshes have extended inland as far as 3 miles. These marshes include lagoons and tidal sloughs connected with the ocean through channels that breach barrier beaches fronting the gaps. The marsh deposits are predominantly fine silty sands, generally highly fossiliferous, silts and clays.

Peat beds originated from buildup of vegetation and decay of organic material in protected areas bypassed by flooding. A peat bed ranging in thickness from a few inches to many feet lies a few feet beneath the floor of Santa Ana Gap. Locally this bed is reported to be 50 feet thick, indicating a continuous buildup over a period of 1000 years. Another extensive peat deposit occurs along the flank of Bolsa Gap. However, there is no evidence that indicates peat beds underlie the unit.

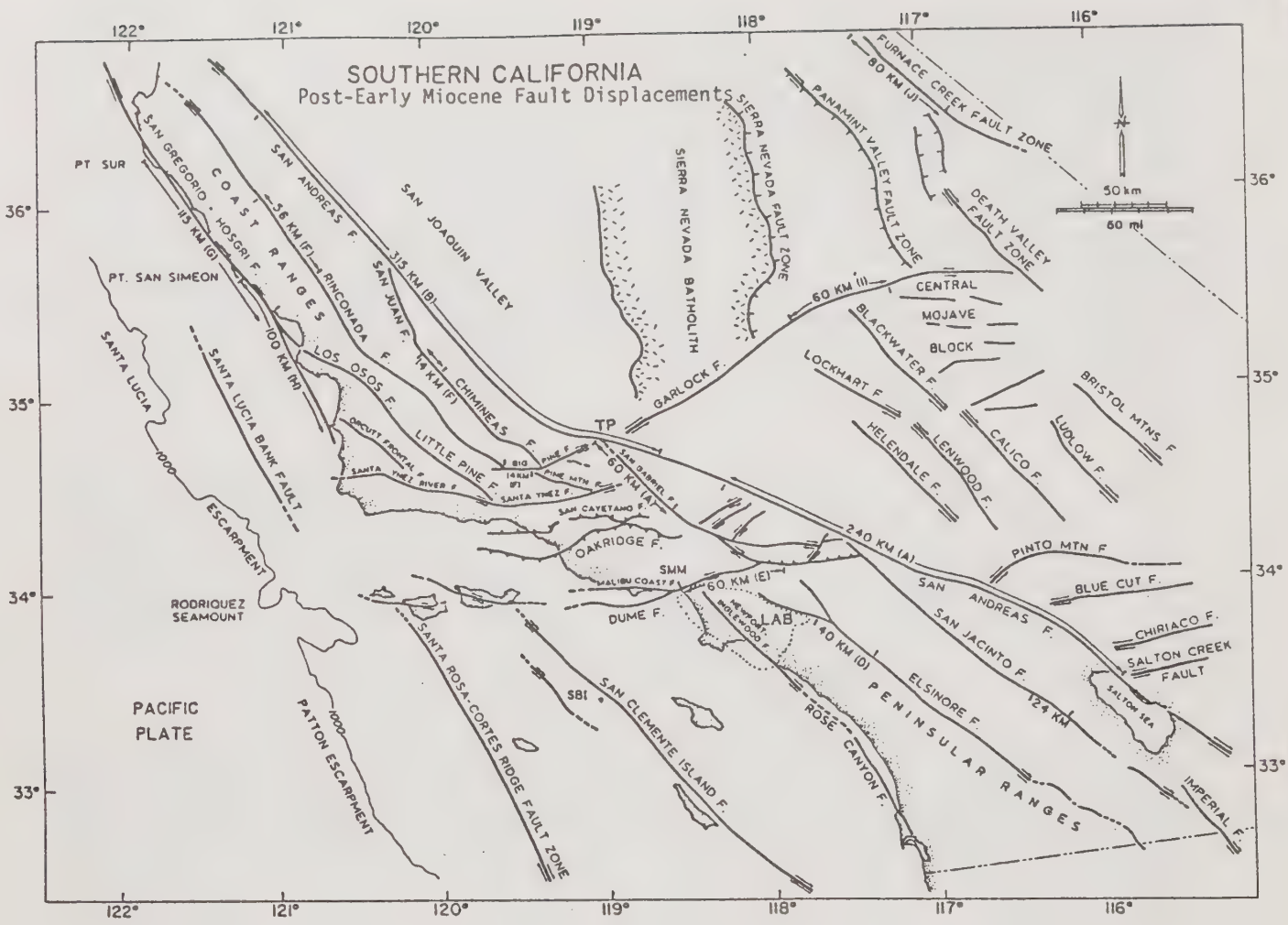
Recent beach deposits form narrow strips fringing wave-cut sea cliffs of the relatively soft Pleistocene sediments of the coastal mesas. Barrier beaches have formed across the Bolsa and Santa Ana Gaps. The narrow cliff-side beaches commonly lie almost entirely within the tidal span, but coastal clastic deposits associated with beach deposition continue seaward for many hundreds, and in places, thousands of feet. The fine to coarse sands which make up the barrier beaches can reach a maximum thickness of 30 feet, and extends inland an average of 800 feet. The barrier beach sands are subject to rapid erosion, and are often transported by longshore currents and storm waves.

STRUCTURE

The project unit lies at the southeastern end of the Los Angeles structural basin, which is a deep, northwest trending central synclinal basin containing over 30,000 feet of sediments.

Faults

Regional faults which have the potential to affect the unit area are shown on Figure G-4. Brief discussions of the primary zones are contained in the following paragraphs.



Source: Wright, T. and Heck, R., 1987, Petroleum Geology of Coastal Southern California, Pacific Section A.A.P.G. Guidebook 60.

315 km

Cumulative fault displacement over past 16 million years

FIGURE G-4

REGIONAL FAULT MAP

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Whittier Fault Zone

The Whittier Fault defines the northeastern edge of the Los Angeles Basin. It is an active, though minor, element of the San Andreas system. An oblique-slip fault, it combines a strong thrust component with right-lateral offset estimated to total at least 3 miles since early Pliocene time. The fault zone dips steeply to the north and is slightly underthrust from the south. Vertical displacement upwards of 14,000 feet has allowed erosion to remove thousands of feet of sedimentary section. The Coyote Hills uplift is related to movement along the Whittier Fault Zone and the Norwalk Fault.

Santa Monica Fault Zone

The northwestern margin of the Los Angeles Basin is defined by the Santa Monica Fault, which is a part of a major west-trending zone of faults which forms the southern boundary of the Transverse Ranges province. To the east, the Santa Monica Fault links with the Raymond Fault and, still further east, the zone includes the Sierra Madre, Duarte and Cucamonga Faults, which are all left-oblique faults.

Newport-Inglewood Fault Zone

The western edge of the basin is formed by the Newport-Inglewood structural zone. A northwest trending zone of faulting and folding that comprises the structural entity which has directly influenced the unit area. Since the 1920's when the individual anticlinal folds along the Newport-Inglewood zone were first delineated, geologists have considered their formation associated with a deep-seated wrench or lateral fault; however, right lateral strike slip movement has been insufficient to create a major displacement of facies or to disrupt the general structural continuity across the zone. Slip has been estimated in the 600 to 3000 foot range, although Hill (1971) suggests that up to 10,000 feet of displacement has occured. The fault zone is defined by discontinuous overlapping faults which vary in dip and sense of separation, and by a series of associated anticlines. Basement rocks are fully involved in the folding. Crustal strain along the structural zone is believed to have originated in middle Miocene time, some 20 million years ago. Since that time, deformation has been recurrent to the present. The last major deformational event near the unit area was expressed at ground surface by gentle upwarping and displacement of upper Pleistocene deposits at Huntington Beach Mesa and by landward tilting and apparent displacement of the Bolsa aquifer. Recent work seems to indicate that other, perhaps older, structures have partially influenced the folding.

The main branch of the Newport-Inglewood fault in the unit area is a major zone of complex shearing which dips steeply southwest beneath the ocean. The fault has resulted in surface cracks and sand boils, offset bedding and stratigraphic discontinuities,

hydraulic discontinuities in aquifers, changes in groundwater quality in aquifers, and difference in relative age of groundwater within the Main aquifer. Vertical displacement along the fault may be evident from linear escarpments or depressions across the Huntington Beach Mesa. Within Bolsa Gap, the fault is not one master break but a shear zone up to 900 feet wide cut by three closely spaced faults.

A southern branch of the Newport-Inglewood Fault coincides with a low escarpment on Huntington Beach Mesa. Within the study area displacement along this fault is undertermined.

Inland from the main branch, stratigraphic discontinuities within Pliocene and lower Pleistocene beds are attributed to lateral displacement along a fault. This structure is tentatively aligned with a northwest-trending fault identified at the inland protion of the Newport Mesa to the south of Santa Ana Gap and is subsequently mapped in the subsurface across the gap and into the eastern edge of Huntington Beach Mesa. The term Bolsa-Fairview fault has been given to this branch. The trace of the Bolsa-Fairview fault at the west edge of Huntington Beach Mesa is marked by a northwest-trending linear gully approximately 2000 feet long. Similar features of lesser magnitude mark the surface trace of the main branch of the Newport-Inglewood fault across the mesa surface.

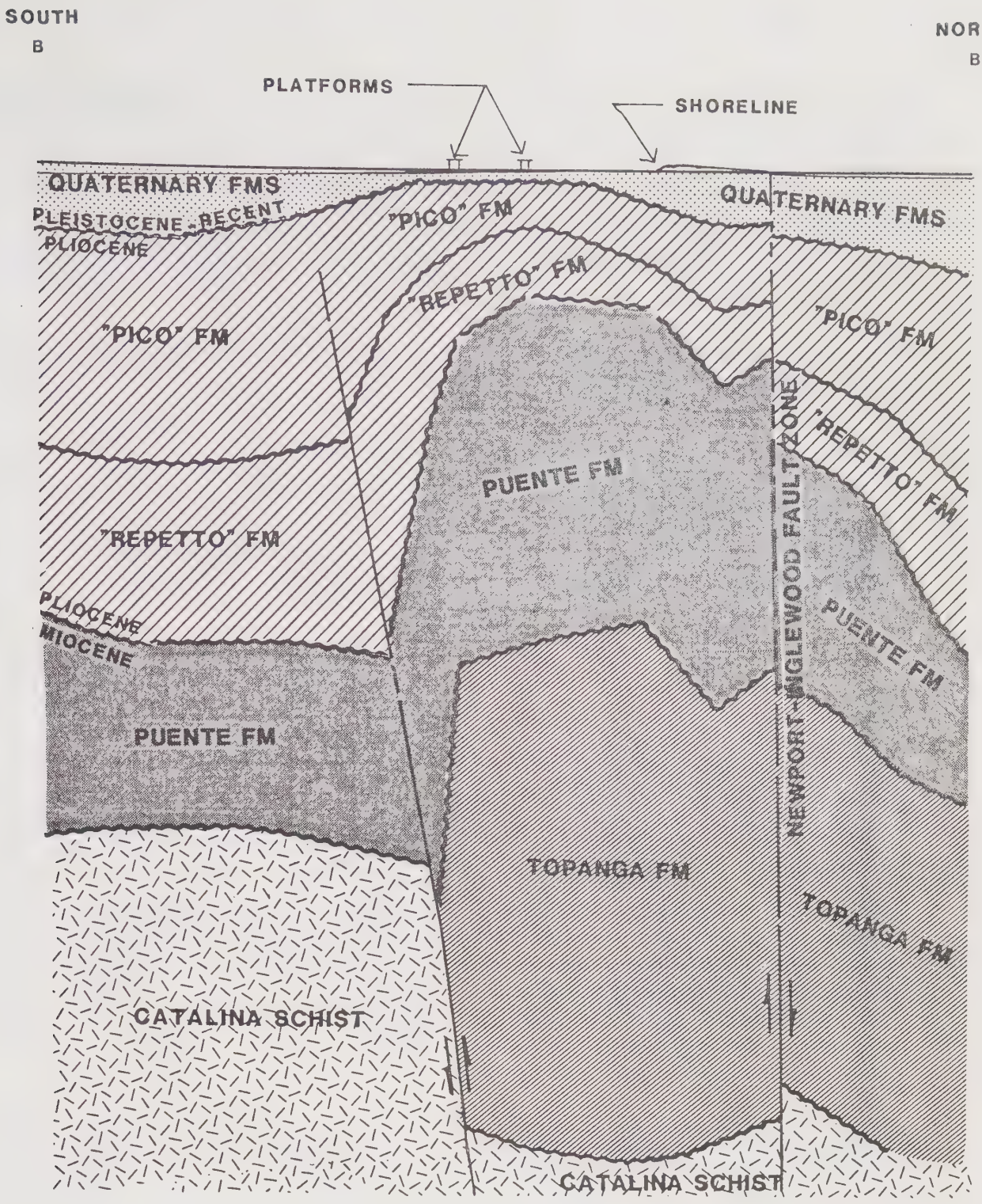
Folds

Aside from the folding closely associated with movements along the above referenced faults, the Anaheim nose, a large anticlinal expression in the southeast central portion of the basin is the only structure of significance. The nose, a westward plunging basin center anticline, lacks any surface expression. Rocks in the core of the fold are of middle Miocene age and older and upper Miocene strata lap out against its flanks. Pliocene strata were deposited unconformably across the crest of the fold.

Of all the folds which are associated with the fault systems of the basin, the Huntington Beach anticline near the southeastern onshore termination of the Newport-Inglewood Fault zone is of most interest to this study. The Huntington Beach anticline is a broad, faulted uplift paralleling the Newport-Inglewood structural zone. Northwest and southeast of the Huntington Beach Mesa the anticline has been eroded by the channels of the Bolsa and Santa Ana gaps. A structural cross sections of the rocks beneath the unit is shown on Figure G-5.

GEOLOGIC HISTORY

Some 210 million years ago, initiation of the opening of the Atlantic Ocean resulted in steady movement of the North American continent westward. The western margin of the continent overrides the denser rocks of the Pacific Ocean floor along a subduction zone which is still in its active phases in the



After Henry, M.J., Pacific Section A.A.P.G.
1987 National Convention,
Field Guide to the Long Beach Area.

FIGURE G-5

GEOLOGIC CROSS SECTION OVER HUNTINGTON BEACH MESA

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Pacific northwest and to the south along the coasts of Central and South America. Descending oceanic material becomes molten at depth and ascends to mix with continental material forming granitic batholiths such as the Andes, Penninsular Ranges, Sierra Nevada and Cascade Ranges and their associated volcanic rocks. Until the late Oligocene (about 29 million years ago) this subduction zone and its related active volcanism extended along the entire western margin of North America. Rocks of the Catalina Schist are remnants of the subduction complex, highly deformed rocks scraped off the descending oceanic plate. Granites of the Santa Ana Mountains form the northernmost part of the Peninsular Ranges batholith.

In the late Oligocene the North American continent began to override a feature called a mid-oceanic ridge which is a source of magma extruded to create new ocean floor. The East Pacific Rise, the name of this particular ridge, began to be subducted beneath the continent. Encroachment of the ridge is marked by the evolution of the San Andreas transform zone, a series of lateral faults which links the northerly and southerly active, non-subducted portions of the ridge.

The high heat flux from the East Pacific Rise increased the ductility of the continental crust, permitting rifting, shearing, folding and rotation of large crustal blocks. The Los Angeles Basin was formed during this period of extension which lasted from 24 to 12 million years ago; the major extension occuring from 14 to 16 million years ago, during middle Miocene time. The basin was subsequently filled with sediment and subjected to periods of compressional deformation.

From the highland areas surrounding the Los Angeles Basin, all uplifted during the past 5 million years, large volumes of sand, silt and clay have been carried down rivers, through submarine canyons and into the basin. The volume of post-Miocene sediments in the Los Angeles basin has been calculated at 1200 cubic miles. Episodes of folding and faulting appear to have been contemporaneous with deposition.

More recent raising and lowering of the sea level, sometimes associated with advancement or receding of the polar ice caps, combined with continued movement along the northwest trending faults such as the Newport-Inglewood Fault zone associated with the San Andreas transform zone, has resulted in the terraced mesas which characterize the unit area.

GEOLOGIC HAZARDS, CONSTRAINTS, AND SENSITIVITIES

Significant Features

The most significant items related to geologic hazards that could affect unit development are surface fault rupture, coastal erosion and surface subsidence.

Landslide Hazards

The relatively steep slopes of the coastal bluffs pose a danger for ground failure. The bluffs, which rise to a height of 30 to 40 feet locally have nearly vertical cliff faces. An attempt to stabilize these faces with concrete slabs and rip-rap has not proven effective, as continued sloughing is evident in the northwestern portion of the unit.

Subsidence

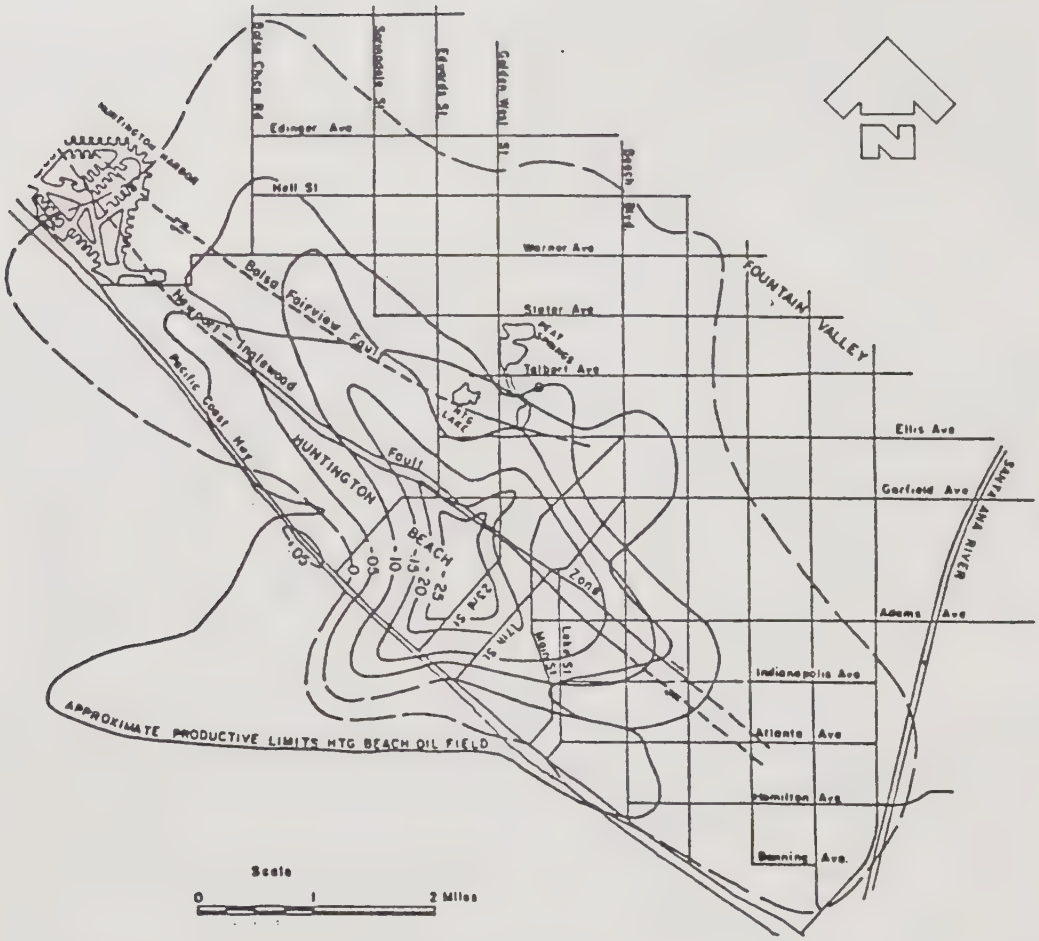
In southern California, geodetic leveling surveys have established subsidence in California coastal areas beginning in the early 1900's. Land subsidence has been correlated with oil production in the Inglewood, Wilmington, Long Beach and Huntington Beach oil fields of the Newport-Inglewood structural zone. Some subsidence in the Santa Ana area has been attributed to extensive groundwater withdrawal from the Santa Ana River basin. Cases of local subsidence have been discovered to be due to decomposition and consolidation of buried peat deposits between Newport Beach and Sunset Beach. Reported cases of subsidence due to oxidation of thick peat beds occurs primarily in the Bolsa and Santa Ana gaps which border the unit.

The area of subsidence of primary concern to the project unit is an area which roughly corresponds with the limits of the Huntington Beach oil field. The greatest measured subsidence has occurred near the intersection of Goldenwest Street and Pacific Coast Highway on Huntington Beach Mesa near the center of the oil field. Estimates of the maximum amount of subsidence range up to five feet since 1920, when oil production began (Figure G-6). The rate of subsidence is reported to have been 0.09 feet/year near the intersection of Goldenwest Street and Pacific Coast Highway over the period 1976 to 1982. It has been indicated in several reports that the rate of subsidence has steadily decreased since water flooding of oil producing zones was initiated in 1959.

Minerals (Petroleum Occurrence)

The presence of an operating oil field over a significant percentage of the project unit is a unique feature of geologic origin.

Oil which originated in the fine-grained organic-rich deep marine source beds of the Los Angeles basin, has migrated along fault and fracture zones to collect in the upwarped sandstone reservoirs of the Huntington Beach anticline. The initial discovery of oil on the Newport-Inglewood trend of anticlines occurred in 1920 at Huntington Beach. Much of the land around the Huntington Beach discovery had been subdivided into town lots, which were leased by a number of small oil companies, becoming the first of California's townlot drilling campaigns. Oil fields on the Newport-Inglewood trend show especially high



SUBSIDENCE IN FEET NEAR HUNTINGTON BEACH, 1964–1969

(Morton and others, 1976)

SOURCE: WOODWARD-CLYDE CONSULTANTS

FIGURE G-6

SUBSIDENCE MAP

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per-acre productivities because the anticlines developed over areas of numerous thick and extensive reservoir sands. Figure G-7 illustrates oil fields of the Newport-Inglewood trend. The 5640 acre Huntington Beach field contains over a billion barrels of oil, making it the third largest in California. In 1987 it contained 1049 active wells out of a total of 3305 wells drilled. Daily Production averaged 19,479 barrels of oil and 9315 Mcf of gas.

Seismicity

Regional Faults

The unit's location in seismically active southern California necessitates a concern for ground-shaking associated with earthquakes occurring along the major regional faults. The following table summarizes the characteristics of the most significant of these regional faults and notes the distance from Huntington Beach to the closest approach of the fault.

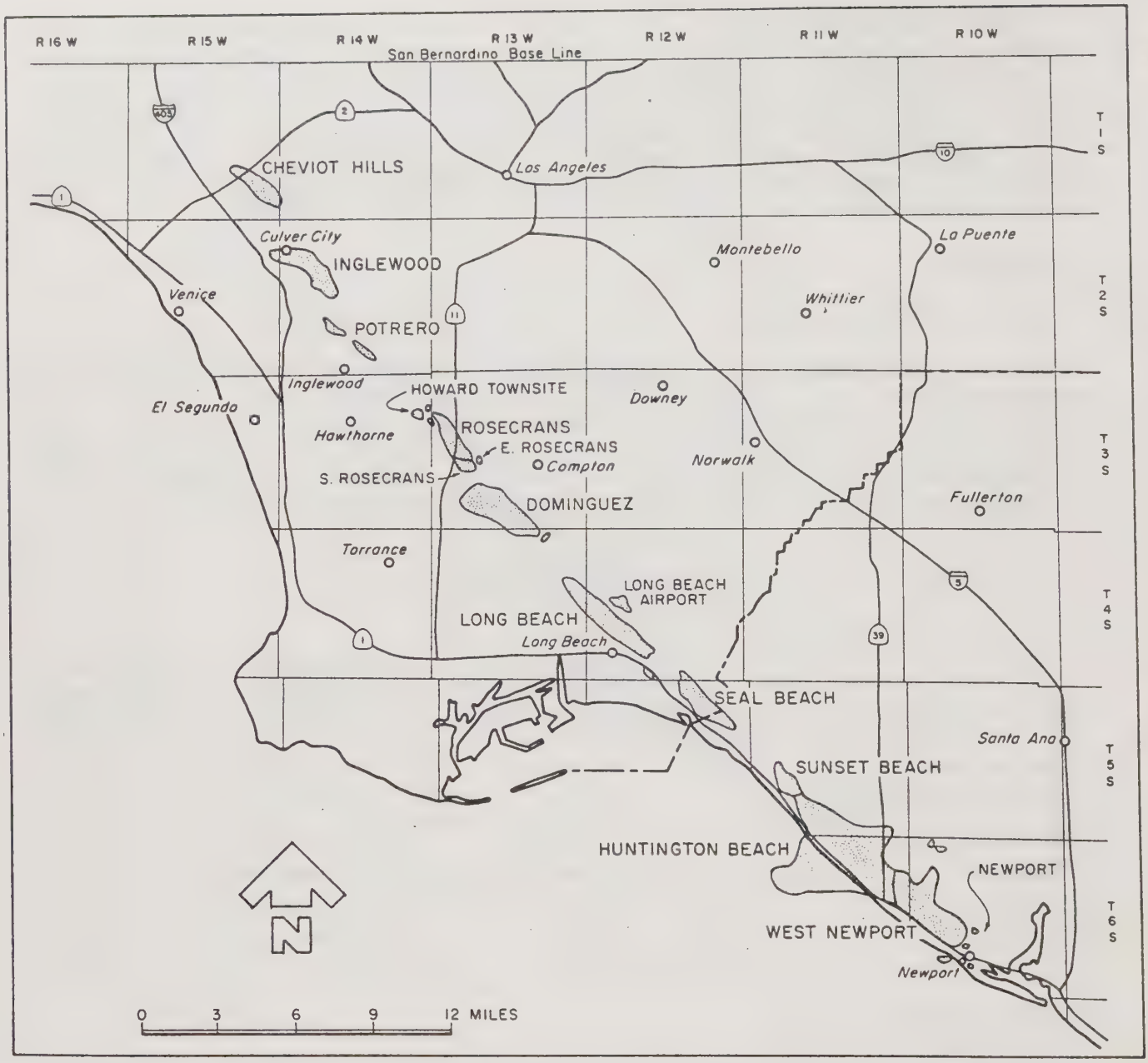
TABLE G-1
Regional Faults

Fault	Distance to City of Huntington Beach	Estimated Long-Term Slip Rate	Estimated Maximum Magnitude
San Andreas	53 mi	37.0 mm/yr	8.5
Newport-Inglewood	0-3 mi	0.5 mm/yr	7.0
Palos Verdes	15 km	0.8 mm/yr	7.0
Whittier	21 mi	1.2 mm/yr	7.0
Elsinore	25 mi	2.3 mm/yr	7.5
San Jacinto	50 mi	8.0 mm/yr	7.5

Local Faults

The primary structure of local concern is the Newport-Inglewood structural zone which consists of several documented and inferred sub-parallel faults in the Huntington Beach area. Three primary branch faults have been identified: the North Branch fault, the South Branch fault and the Bolsa-Fairview fault (Figure G-8).

North Branch Fault. The North Branch fault is a confirmed active trace of the Newport-Inglewood structural zone and portions of this fault have been placed by the California Division of Mines and Geology in an Alquist-Piolo special studies zone (Figure G-9). Areas to be developed within a special studies zone must undergo geotechnical evaluations to determine the necessary precautions to be taken in these areas of potential surface rupture. The North Branch fault, locally called the High School



Source: Barrows, A.G., 1974, California Division of Mines and Geology Special Report 114.

FIGURE G-7

OIL FIELDS OF THE NEWPORT-INGLEWOOD STRUCTURAL ZONE

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fault, has long been recognized as a major structural discontinuity in the area. The most destructive earthquake event to occur on this fault was the 1933 Long Beach earthquake which had a 6.3 Richter scale magnitude and an epicenter located offshore of Newport Beach.

Most subsurface data regarding the fault originated from oil field structural interpretations, which confirm the presence of a major fault at depth between various well locations. Subsurface mapping indicates a shattered zone bowing seaward beneath the Bolsa gap. At depth within the Bolsa Gap the North Branch fault has acted as an effective salinity barrier. The salinity barrier is part of the technical basis for extension of the Alquist-Piolo special studies zone across the Bolsa Gap into Huntington Beach Mesa.

The North Branch fault has been observed by local geologists to offset recent (less than 10,000 years old) deposits on the Bolsa Chica Mesa. The North Branch fault was also observed to have possibly offset recent deposits on the west side of Huntington Beach Mesa and to have offset a drainage channel within Bolsa Chica Gap. A Woodward-Clyde consultants report incorporated in Orange County's Bolsa Chica Land Use Plan indicates that in the Huntington Beach Mesa the fault trace is confined to a zone approximately 80 feet wide. The active portion of the North Branch fault was not extended across Santa Ana Gap due to lack of evidence for its location and activity, (Leighton and Associates, 1986). Interpretation of oil well data by the California Division of Oil and Gas for the West Newport Oil Field indicates two branches of the Newport-Inglewood structural zone some 2,000 to 3,000 feet beneath the Santa Ana Gap. Groundwater well data shows evidence of these branches at depths of approximately 200 feet. Near-surface rupture has not been confirmed across the gap. One of these splays could connect across the gap to the North Branch fault mapped on Newport Mesa. Portions of the North Branch fault over Newport Mesa are presumed active on the basis of technical data derived from local studies.

South Branch Fault. Poland and others (1956) first inferred the existence of the South Branch fault across Huntington Beach Mesa based on geomorphology. Oil field structural maps show two faults running roughly parallel to the fault inferred by Poland and others (1956); however, these faults do not offset rocks younger than Lower Pliocene, and do not come within 1,500 feet of the surface. Repeated trenching across projected fault traces has yielded no solid evidence of a surface rupture. It is believed that the South Branch has not been active within Pleistocene or Recent time.

Bolsa-Fairview Fault. A number of subsurface investigations have been performed by local geologists to determine whether or not surface rupture has occurred along this branch. The fault does not appear to offset near-surface deposits of upper Pleistocene to recent age. It is likely that the Bolsa-Fairview fault is an

ancient fault trace which has not been active throughout recent time.

Olive Street Fault and Walnut Street Fault. These faults were first mapped by Poland and others (1956). No supporting data was included in their report. Oil well data indicates clear subparallel faults at depths greater than 3,000 feet which can be traced upward into irregular shattered zones. No surface rupture or geomorphic evidence support recent activity on these faults.

Historical Earthquakes

Historical earthquake damage to the unit area has been minimal. During the 1941 Long Beach earthquake, a 500-foot extension to the Huntington Beach Municipal pier, constructed of steel and concrete, separated from the main section resulting in a 2-foot crack. The following table lists characteristics of some of the more significant earthquakes associated with the Newport-Inglewood structural zone.

Table G-2

Date	Magnitude	Epicenter	Summary
6/21/20	4.9	Inglewood, CA	Numerous building failures and severe structural damage to poorly built structures in localized area. Several people injured, 1 killed.
3/10/33	6.3	3.5 miles off of Newport Bch.	Numerous building failures, including schools. Bridges, roads, utilities damaged. Damage in excess of $40M. 120 killed, hundreds injured. Felt over 100,000 sq. mi. area. Fourth most destructive quake in U. S. history.
10/2/33	5.4	Signal Hill, near Los Alamitos	Considerable minor damage.
12/27/39	4.5	Huntington Park-Long Beach area	Minor damage to structures.
10/21/41	5.0	Long Beach	Damage in West Dominquez oil field. Minor damage to structures. $10,000 damage in Gardena.

11/14/41	5.4	Long Beach	50 buildings severely damaged. Power failures, damage to pipelines, tanks, 2 schools condemned $1M damage.
6/18/44	4.5	Dominquez Gap near Compton	Minor property damage.
10/27/69	4.5	1.5 mi offshore Laguna Beach	Extent and type of damage damage unknown.

Liquefaction

Liquefaction is the phenomenon in which a cohesionless soil below the water table loses its strength during an earthquake. Laboratory tests have demonstrated that uniformly graded material such as beach sand are more susceptible to liquefaction. Intensity and duration of ground shaking are major factors influencing the degree of liquefaction a material may experience. The longer the duration of strong ground shaking, the more likely liquefaction will occur. The existence of a shallow water table beneath the project unit heightens the potential for liquefaction in this area, however no detailed studies have been conducted within the unit.

Tsunamis

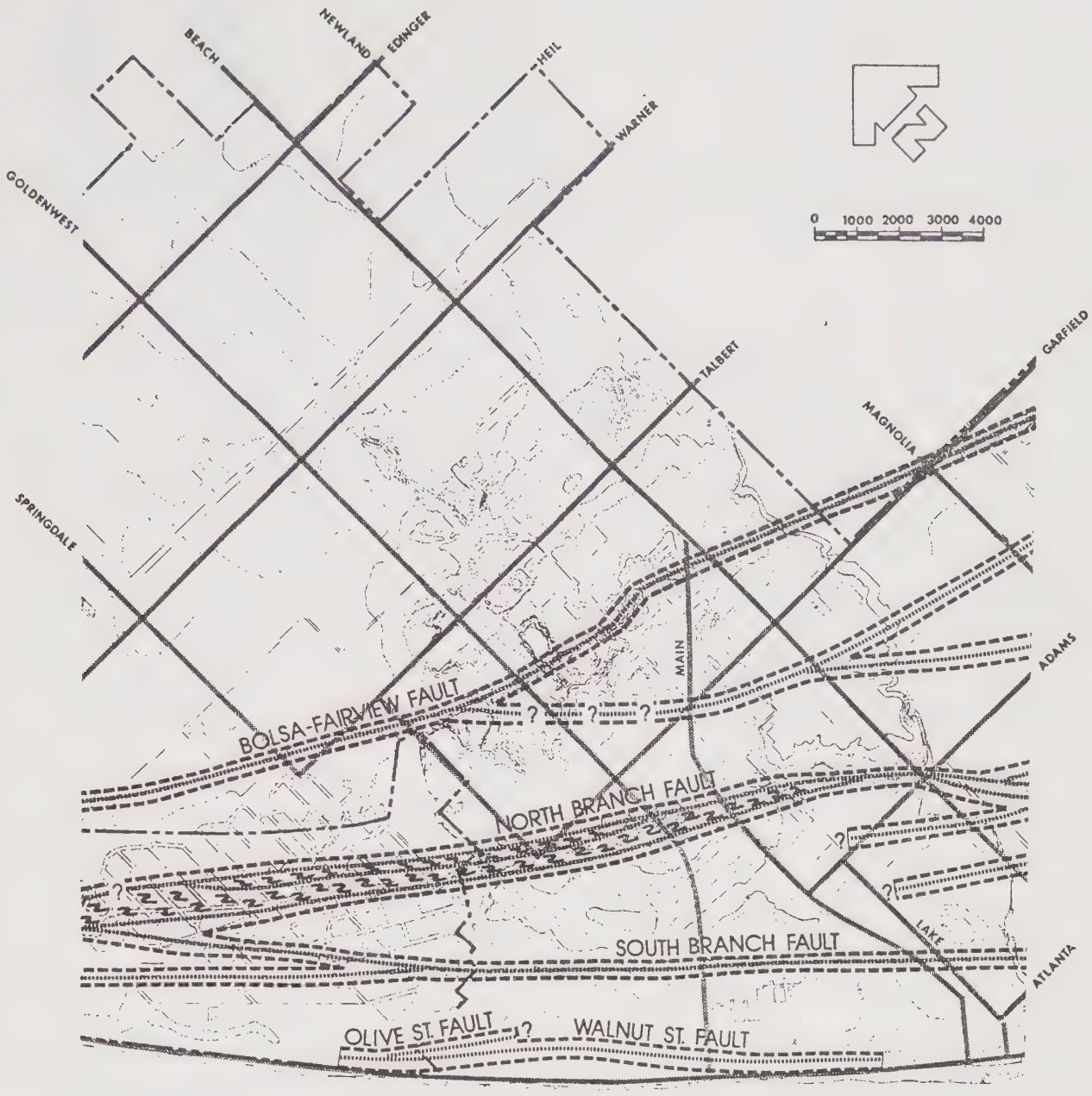
Generated by earthquakes, landslides or volcanic activity, tsunamis are sea waves that are known to travel long distances from their source. Earthquakes are common along the Pacific Ocean rim, so theoretically, all coastal areas could potentially be subject to tsunamis. Historically, the most damaging tsunamis are associated with large vertical displacements occurring during earthquakes of magnitude 7.5 or greater. Tsunamis have been generated from source areas off the coast of Alaska, Chile, and Japan. A 20 foot high tsunami was recorded at Crescent City in northern California that originated 1500 miles away as a result of the March 1964 Alaskan earthquake which had a magnitude exceeding 8. Some damage due to convergence of rapid currents within the Los Angeles and Long Beach harbors was associated with this tsunami, but no damage was reported further south. Historically, there has been no damage attributed to tsunamis at Huntington Beach, however a remote possibility of a tsunami striking the area does exist.

Coastal Erosion

The beach areas, with the exception of the unstable bluff faces discussed above, appear to be relatively stable. Seasonal variations in the sediment distribution along the shoreface and offshore result in a general lowering and narrowing of the beaches in the winter months due to increased storm events, a greater breaker height and a dominant southerly long shore current.

RECOMMENDATIONS

This area has been the subject of extensive analysis because of the regional seismic characteristics and the local oil production activity. There does not appear a need for additional study unless a significant structure was planned to be located within the unit.



SOURCE: LEIGHTON-YEN & ASSOC. 9-1-73

HIGHEST SEISMIC RISK (GREATEST SURFACE RUPTURE POTENTIAL WITHIN CITY

AREA OF INTENSIVE SHEAR

BURIED TRACE OF FAULT (WITHIN 400' ZONE)

UNCERTAINTY AS TO EXISTENCE OR EXTENSION OF FAULT

FIGURE G-8

LOCAL FAULT MAP

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Source: State of California
Special Studies Zones

Newport Beach and Seal Beach Quadrangles
Effective: July 1, 1986

FIGURE G-9

ALQUIST-PRIOLO SPECIAL STUDIES ZONE

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RESOURCE INVENTORY

SOILS

STATE BEACH GENERAL PLAN

(CITY OF HUNTINGTON BEACH)

July, 1987

by

Laurel K. Vedder

Staff Geologist

Barrett Consulting Group Inc.

SOILS

INTRODUCTION

Information on soils of the project unit was obtained from the Soil Survey of Orange County and Western Part of Riverside County, California, published by the United States Department of Agriculture Soil Conservation Service and Forest Service in cooperation with the University of California Agricultural Experiment Station. Definitions of capability unit classifications and Storie Index can be found in the above-referenced volume. Further data on soils of southern California was obtained from the California Department of Conservation's 1979 report, California Soils: An Assessment.

California's soils have been placed into twelve soil regions defined by particular climate, parent material, vegetation and topography. The project unit lies within Region VII, Southern California. The Southern California Region contains soils derived from granitic and sedimentary parent material in areas with 9 to 25 inches of rainfall yearly, supporting a natural vegetation of shrubs, oak and grass. The region encompasses almost 10% of the state. Rolling hills, agricultural valleys giving way to urbanization, and a Mediterranean climate prevail within the region. The alluvial soils of the region are mostly sandy loams of a light-brown color which support field, citrus and truck crops.

The soils types of the unit all consist of moderately well drained soils forming nearly level to moderately steep coastal terraces. The soils of unit area are common to marine terraces and older alluvial fans and on remnant alluvial terraces in the coastal foothills. The soils are sandy loams having a well defined subsoil developed from sand-rich sediments and have historically been used for pasture, range, barley, and urban development.

SOILS DESCRIPTIONS AND INTERPRETATIONS

The three soil types found within the unit are all classified within the Myford Association. The Myford Association contains soils which develop on nearly level to moderately steep, moderately well drained surfaces. These sandy loams have a strongly developed subsoil, and are commonly found on marine and alluvial terraces. The association occurs from along the coastline to to 5 miles inland and along the lower edges of the foothills. The soils of the unit formed from the sand-rich sedimentary rocks which compose the Huntington Beach Mesa. Natural Plant cover found on these soils includes annual grasses and forbs and in some areas scattered brush. This soil association occupies 10 percent of Orange County and has formed in areas where the average annual rainfall is 12 to 20 inches,

the average annual air temperature is 62°F and the frost-free season is 270 to 350 days.

General Description

The three soil types present in the unit are mapped on Figure S-1. General descriptions are contained in the following paragraphs.

Beaches Deposits

Beaches consist of sandy, gravelly, or cobbly coastal shores that are washed and rewashed by tidal and wave action. These areas may be partly covered with water during high tides or stormy periods. Whether beach areas are dominantly sandy or gravelly is a function of seasonal variations in sand supply related to storm and tidal activity. The unit is primarily a sandy beach with localized gravelly sands, the latter appearing more commonly in winter or after heavy storm waves. Beach deposits support little or no vegetation and have no agricultural value, although they provide excellent recreation areas. Present land uses common along beach fronts are recreation and urban development. Beach sands have very slow runoff and the erosion hazard is high. They are classified in capability unit VIIIw-1 and have a Storie index less than 10 (nonagricultural).

Marina Series

The Marina series consists of somewhat excessively drained soils common on coastal terraces. These soils developed from sandy deposits. The soil forms slopes ranging from 0 to 9 percent. In a typical profile the surface layer is grayish brown, light brownish gray, and pale brown loamy sand that is 33 inches thick. It ranges from single grain to massive. Dry consistence ranges from loose to slightly hard. The subsoil is a light yellowish brown and light gray loamy sand which is 27 inches thick and contains less than 10 percent 0.125 to 1-inch wavy bands of dark brown sandy loam. The substratum is very pale brown sand containing a few 0.25 to 0.5 inch wavy bands of dark brown sandy loam. The soil is medium acid throughout and is moderately permeable. Available water capacity is 3.5 to 5.0 inches and the effective rooting is 60 inches or more.

Marina Loamy Sand, 0 to 2 percent slopes-This nearly level soil occurs on terraces near the coast. If the soil is bare, runoff is slow and the erosion hazard is slight. These soils are primarily used for field crops, pasture, range and urban development. Capability has been classified as IIIs-4 and the Storie index is 90.

Marina Loamy Sand, 2 to 9 percent slopes-This gently sloping to moderately sloping soil generally occurs on terraces near the



Source: U.S. Department of Agriculture
Soil Conservation Service

115 - Beach Deposits

161 - Marina Loamy Sand, 0 to 2 percent slopes

162 - Marina Loamy Sand, 2 to 9 percent slopes

172 - Myford Sandy Loam, 0 to 2 percent slopes

173 - Myford Sandy Loam, 2 to 9 percent slopes

FIGURE S-1

SOILS

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coast. If the soil is bare, runoff is slow to medium and the erosion hazard is slight to moderate. Capability has been classified as IVs-4 and the Storie index is 65.

Myford Series

The Myford series consists of moderately well drained soils on marine terraces. These soils formed from sandy sediments and form slopes ranging from 0 to 30 percent. In a typical profile the surface layer is pale brown and pinkish gray, medium acid sandy loam 4 inches thick. The subsurface layer is pinkish gray, medium acid sandy loam 8 inches thick. The upper 6 inches of the subsoil is brown, medium acid sandy clay; the next 17 inches is brown, neutral and moderately alkaline sandy clay loam; and the lower 36 inches is light brown, calcareous sandy clay loam and sandy loam. The substratum is very pale brown slightly acid sandy loam to a depth of 79 inches or more. The soil is very slowly permeable.

Myford Sandy Loam, 0 to 2 percent slopes - This nearly level soil generally occurs on broad terraces. If the soil is bare, runoff is slow and the erosion hazard is moderate. Presently these soils are used for citrus groves, pasture, ranges, barley and urban development. Capability is classified as IVe-3; Storie Index is 51.

Myford Sandy Loam, 2 to 9 percent slopes - Profiles of this soil are similar to the typical profile, but shallower due to erosion. Subsoil is often exposed and deep gullies have formed locally. If the soil is bare, runoff is medium and the erosion layard is moderate. Presently these soils are used as range, for barley crops and urban development. Capability is classified as IVe-3; Storie Index is 46.

CONSTRAINTS AND SENSITIVITIES

Erosion

Slope inclination along the bluffs bordering Huntington Beach Mesa ranges from 2:1 to 1.5:1 for natural slopes to nearly vertical for cut slopes. The bluffs are composed primarily of exposures of the Lakewood Formation. The firm sandstones and mudstones limit erosion to surficial sloughing.

Oceanward exposures of the bluffs bordering Huntington Beach Mesa may experience a greater rate of erosion due to continuing effects of storm waves and pedestrian traffic to the beach areas.

Water erosion as a result of run-off from roadways and parking lots may also affect the beach facing bluff slopes.

Land leveling can be conducted on the types of soils which make up the majority of the unit without exposing unfavorable materials.

Sand Supply

The unit lies within the San Pedro littoral cell. Sediments within the cell are moved southeasterly along the shoreline by coastal processess and eventually move offshore through the Newport Submarine Canyon. The San Pedro littoral cell extends from the southeastern termination of the Palos Verdes Peninsula to the Newport Bay area. Three rivers contribute sand-sized sediments to the San Pedro littoral cell: The Los Angeles River, the San Gabriel River and the Santa Ana River. In the past these rivers terminated naturally in bay and lagoonal areas which serve as natural sediment entrapment areas, suggesting that variability in shoreline sediment delivery was severe under natural conditions.

Under present conditions with channelization along the lower reaches, shoreline sand delivery is probably not as intermittent as under natural conditions. Average annual coastal delivery has been reduced from 0.3 to 0.4 million m^3. Present channelization has also fixed the position of river outlets, preventing the natural distribution of sediments along the shoreline. Artificial stabilization may thus be as severe in terms of shoreline stability as the probable reductions in sand delivery. The collective data base on flood flows and sediment transport has mostly been obtained during man's modification of these rivers. Sediment discharge measurements near the mouths of the Los Angeles and San Gabriel Rivers were only begun in 1976. Thus, the sand discharge values given in Table S-1 are subject to error and may be considered order-of-magnitide estimates.

Table S-1

Annual Sand Deliveries
Under Natural Versus Present Conditions

River	Area (km^2)	Natural Conditions ($m^3/yr.$)	Present Conditions ($m^3/yr.$)
Los Angeles River	2,155	600,000	200,000
San Gabriel River	1,663		
Santa Ana River	4,406	330,000-500,000	140,000

Source Taylor, B.D. 1981. Coastal Sediment Delivery by Major Rivers in Southern California. Environmental Quality Laboratory, California Institute of Technology EQL Report No. 17-C; pp. 314

RECOMMENDATIONS

The unit's size and configuration severly limits the types of soils found here. Beach sands make up the majority of the soil types and are projected to be maintained as open space-similar to the remainder of the unit's land use policy. Further study of factors affecting future sand supply to the unit may be necessary to establish the long-term stability of the beach.

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RESOURCE INVENTORY

PLANT LIFE

STATE BEACH GENERAL PLAN

(City of Huntington Beach)

July 1987

by

Jack Easton, Biologist

Tierra Madre Consultants

PLANT LIFE

INTRODUCTION

Information for this study was obtained through literature review and a field survey. Literature sources include the Final Environmental Statement for the Pacific Coast Highway Widening Project, a computerized printout of the sensitive biological elements for the Long Beach 1 x 2 degree USGS quad from the California Natural Diversity Data Base, and regional biological field guides. Jack Easton spent five hours on June 23, 1987 performing the field survey. All observed plant and animal species were noted. Those plant species not identified in the field were collected for identification by Andrew Sanders at the herbarium of the University of California at Riverside.

TERRESTRIAL VEGETATION

The composition of the exisiting vegetation is a result of the combination of management for intensive recreational use, the close proximity to the ocean, and the sandy beach soil. The existing vegetation is above the level of the high tide. This consists of species suited to the moderate coastal climate and able to withstand extensive human disturbance and saline water. Much of the vegetation was planted for purposes of soil stabilization and for esthetic reasons. The sandy soils between the high and low tide levels are constantly washed and rewashed by the ocean waters and support no vegetation.

Communities

The existing community is a mix of introduced species and remnant species of the native coastal strand community (Munz, 1974). Most of the existing vegetation was apparently planted for slope stabilization purposes and for esthetic effect.

A strip which varies in width form ten to forty feet, extends to the south from the northern boundary of the site for approximately 3,000 feet. In this area, remnant species of the native coastal strand community, such as saltgrass (Distichlis spicata), ambrosia (Ambrosia chamissonis), sand-spurrey (Spergularia marina), and sea rocket (Cakile maritima), are intermixed with introduced species such as red brome (Bromus rubens), Australian saltbrush (Atriplex semibaccata), and beardgrass (Polypogon monspeliensis).

Centrally located on the site is a twenty foot wide, prostrate layer of iceplant (Gasoul crystallinum) intermixed with a few myoporum trees (Myoporum laetum). This portion of the community is approximately 2,500 feet long.

Palm trees (Washington sp.) and grass occupy a strip on the southern portion of the project area. This strip is approximately 4,500 feet in length and varies in width from twenty to forty feet.

The introduced species were planted or have established by natural means. Both the introduced and remnant native species are well suited to the site conditions of sandy beach soil, high salinity, and moderate climate and to the heavy recreational use received by the area.

Community Dynamics

Succession - The results of succession in the community will depend on the activities of the managing agency. The central and southern portions of the community will likely remain in their present condition. If the northern portion of the community is allowed to grow and develop without interference, the result will likely be a community consisting of a shrub layer and a herbaceaous layer. The shrub strata will be dominated by widely spaced Australian saltbush and haplopappus (Haplopappus venetus). The herbaceous layer will include saltgrass, red brome, sand-spurrey, and beardgrass. If an active landscape management program is undertaken, the results of community succession will depend on the methods of management.

Fire History - The natural coastal strand community which previously inhabited the study area was not a fire influenced community. The moderate climate due to the strong coastal influence, the lack of contiguous fuel due to the widely spaced vegetation, and the high moisture content of the vegetation resulted in conditions in which fire played little or no role in the ecosystem.

Fire Potential - The existing community is not, and most likely will not be, conductive to fire playing an active role. Most of the existing vegetation, such as iceplant, Australian saltbush, and sand-spurrey, is fire resistant. The existing fuel lacks contiguity due to its uneven distribution. The marine climate with its moderate temperatures and high humidity is not conductive to an active fire role. The combination of fuel types and distribution with the local climate results in conditions of very low fire hazard.

Historical Influences

The urbanization of Orange County and the intensive development of beach recreation resulted in major alteration of the local ecosystems. The site was originally a barrier bar which separated the Pacific Ocean from a low-lying marsh.

Pristine Vegetation

The original vegetation of the barrier bar consisted of the coastal strand community. Species likely included sand verbena (Abronia latifolia, A. maritima), herbaceous saltbush (Atriplex californica, A. leucophylla), and morning glory (Convolvulus simulans). If human activites had not interfered with the growth and development of this community, the site would currently be inhabited by the mature coastal strand community.

RARE AND ENDANGERED PLANTS

No rare or endangered plants were observed during the field survey nor are any known from other environmental documents regarding the site.

SITE INTEREST PLANTS

The existing vegetation is fairly common along coastal areas of southern California. Some of the plants may be of special interest as they represent remnants of the pre-existing natural community.

EXOTIC PLANTS

Several of the existing plant species are exotic (non-native and/or non-indigenous) to the site. Many of these species were planted on the site as part of previous landscaping efforts. These species were apparently selected for landscaping due to their suitability to local conditions and exhibit healthy, vigorous growth.

RECOMMENDATIONS

The existing community is well suited to the site conditions and to the recreational use patterns. We recommend that the vegetation of the community be maintained in its existing condition. Appropriate landscape management activities should be undertaken to ensure the long-term survival of the community.

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APPENDIX

Angiospermiae: Dicotyledons Flowering Plants: Dicotyledons

Aizioaceae	**Carpet-weed family**
*Carpobrotus edulis	Hottentot-fig
*Gasoul cryptallinum	Iceplant
Asteraceae	**Sunflower Family**
Ambrosia chamissonis	Ambrosia
Baccharis glutinosa	Mulefat
*Conyza bonariensis	Conyza
*Conyza canadensis	Horseweed
Haplopappus venetus	Haplopappus
Boraginaceae	**Borage Family**
Heliotropium curvassicum	Heliotrope
Brassicaceae	**Mustard family**
*Cakile maritima	Sea-rocket
Carophyllaceae	**Pink Family**
Spergularia cf. marina	Sand-spurrey
Chenopodiaceae	**Goosefoot Family**
*Atriplex semibaccata	Australian saltbush
*Bassia hyssopifolia	Bassia
Suaeda sp.	Sea blite
Myoporaceae	**Myoporum family**
*Myoporum laetum	Myoporum
Solanaceae	**Nightshade family**
*Nicotiana glauca	Tree tobacco

Angiospermae: Monocotyledonae Flowing Plants: Monocots

Poaceae	**Grass Family**
*Bromus mollis	Soft chess
*Bromus rubens	Red brome
*Cortaderia sp.	Pampas grass
Distichlis spicata	Saltgrass
Polypogon monspeliensis	Beardgrass

* Denotes introduced (non-native) species.

RESOURCE INVENTORY

ANIMAL LIFE

STATE BEACH GENERAL PLAN

(City of Huntington Beach)

July 1987

by

Jack Easton

Biologist

Tierra Madre Consultants

ANIMAL LIFE

INTRODUCTION

Information for this study was obtained through literature review and a field study. Literature sources include the Final Environmental Statement for the Pacific Coast Highway Widening Project, a computerized printout of the sensitive biological elements for the Long Beach 1 x 2 degree USGS quad from the California Natural Diversity Data Base, and regional biological field guides. Jack Easton spent five hours on June 23, 1987 performing the field survey. All observed plant and animal species were noted.

The number of animal species observed during the field survey was limited due to the season during which it was performed. A more in depth field survey, carried out during differect seasons, would reveal the presence of more species, primarily migratory birds.

ECO REGIONS

Biotic Communities

The site consists of a strip of beach varying in width from approximately 100 feet to 500 feet. The local ecosystem is influenced by the close proximity to the Pacific Ocean, by the moderate local climatic conditions, and by intensive management for recreation.

The local climate is dominated by the maritime influence. Seasonal temperatures average 50°F in the winter and 67°F in the summer. Average humidity is above 50 percent with precipitation in the form of winter rains. Annual rainfall averages six inches.

The existing disturbed beach community is heavily influenced by human activities on the site. The property is used intensively for recreational purposes by the surrounding metropolitan population. Few mammals or reptiles inhabit the site. Several avian species utilize the area both seasonally and year-round. Those species which do inhabit the area are readily adaptable to extensive mammal human disturbance.

The only species of mammal observed on the site was the California ground squirrel. The diet of this rodent includes seeds, vegetation, eggs, and berries. Degraded slopes and bluffs, reinforced with broken concrete, along the beach provide burrowing habitat for this colonial animal. This species hibernates during October or November and is active diurnally throughout the rest of the year. The existing habitat likely supports a breeding population of one to three animals per acre. The California ground squirre has been host to the plague

and is sometimes considered detrimental where human interests are concerned.

Side-blotched lizards were the only reptile species observed on the site. This ground-dwelling species inhabits the degraded slopes and reinforced bluffs along the beach. This lizard is active year-round. The side-blotched lizard feeds on insects, mites and spiders.

A variety of shorebirds and gulls utilize the disturbed beach habitat both year-round and as seasonal migrants. Observed species of gulls included ring-billed gull, California gull, and herring gull. Marbled godwits and sanderlings were the only shorebirds observed during the field survey.

HISTORICAL INFLUENCES/PRISTINE FAUNA

Records indicate that this habitat was originally a barrier bar which separated the Pacific Ocean from a low lying marshland. The urbanization of Orange County and the intensive development of beachland recreation altered this habitat into one which is heavily influenced by human activities.

In addition to the existing fauna it is likely that mammals such as coyotes, skunks, and oppossum utilized the site.

RARE, ENDANGERED, AND THREATENED SPECIES

An established nesting area for the California least tern (Sterna atillarum browni), listed by the California Department of Fish and Game and the U.S. Fish and Wildlife Service as endangered, is located near the site. This subspecies of tern spends its breeding season , mid April through late August, in coastal southern California. It migrates for the remainder of the year to Central and South America. The tern forages for fish and crustaceans around bays, estuaries, harbors, and tidal channels such as the nearby mouth of the Santa Ana River. The project area and the adjacent offshore habitat may occasionally be utilized as a perching and foraging area by this bird.

The year-round range of the California brown pelican (Pelecanus occidentalis californicus), includes southern California. This subspecies is listed as endangered by the California Department of Fish and Game and the U.S. Fish and Wildlife Service. Small numbers of non-breeding birds remain in southern California during the breeding season. The majority of the birds breed in Baja California and the Channel Islands from November to mid May. Fish is the exclusive food of the California brown pelican. It may occasionally forage in the offshore habitat adjacent to the project area.

SPECIAL INTEREST SPECIES

The California least tern and the California brown pelican are both species of special interest due to their endangered status.

RECOMMENDATIONS

Those species of animals which currently utilize the disturbed beach habitat are well adapted to the altered site conditions and heavy patterns of human use. We recommend that disturbance of ground dwelling animals be kept at a minimum and that existing management activities be continued.

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APPENDIX

REPTILIA	REPTILES
Iguanidae	**Iguanids**
Uta stansiburiana	Side-blotched lizard
AVES	BIRDS
Scolopacidae	**Sandpipers**
Limosa fedoa	marbled godwit
Calidris alba	Sanderling
Laridae	**Skuas, jaegers, gulls, terns**
Larus californicus	California gull
Larus delawarensis	Ring-billed gull
Larus argentinus	Herring gull
Corvidae	**Crows and jays**
Corvus brachyrhynchos	American crow
Fringillidae	**Finches**
Carpodacus mexicanus	House finch
MAMMALIA	MAMMALS
Sciuridae	**Squirrels**
Spermophilus beecheyi	California ground squirrel

Only those species observed during the field servey are listed here. Many others may be present on an occasional basis or during other seasons.

RESOURCE INVENTORY

MARINE LIFE

STATE BEACH GENERAL PLAN

(CITY OF HUNTINGTON BEACH)

July, 1987

by

Frank L. Haselton

Director of Planning

Southwest Region

Barrett Consulting Group Inc.

MARINE LIFE

INTRODUCTION

Information obtained for this section was retrieved from established literature and site visits. The unit's size does not encompass a separate marine entity - it is within a larger geographical context. Therefore, the following paragraphs briefly discuss the general characteristics of the marine near shore habitat as it relates to the unit.

EXPOSURE

The water unit's area does not experience a vast contrast of conditions due to tidal activity. This is because of the uniformed beach/water line, the absence of river months, lagoons, wetlands, or bays, and the presence of an extensive shelf that modifies wave and tidal activity. Therefore, the marine environment adjacent to the unit does not vary to a significant degree, and will be briefly discussed as a single entity.

Surf

The entire unit is subject to open ocean surf conditions without natural or artificial protection or barriers. The spring and summer months are characterized by western swells averaging two to five feet in height. The autumn months often experience larger waves generated by tropical storms to the south. During the winter months, the unit is subjected to consistently large waves that are the result of northern storms.

MARINE FAUNA

The marine environment that is adjacent to the unit is located within the Southern California Bight which is part of the California Fish Faunal Region and the California Molluscan Faunal Province.

These areas cover a large territory and contain a large amount and diversity of fish fauna. The best sampling occured in 1981 off of the mouth of the Santa Ana River - approximately 2.5 miles south of the unit. Table ML-1 indicate the prominent species of fish revealed during that sampling. Additionally, the molluscan Faunal Province contains a diverse invertebrate population. It has been established in previous analyses that the invertebrate species identified in Table ML-2 periodically inhabit the general marine area near and around the unit.

TABLE ML-1

Jacksmelt	*Atherinopsis californiensis*
Topsmelt	*Atherinops affinis*
California Grunion	*Leuresthes tanuis*
Opaleye	*Girella nigricans*
Northern Anchovy	*Engraulis mordax*
Shiner Surf Perch	*Cymatogaster aggregata*
Dover Sole	*Microstomus pacificus*
Speckled Sanddab	*Citharichthys stigmaeus*
Diamond Turbot	*Hypsopsetta guttulata*
Calif. Tonguefish	*Symphurus atricauda*
Calif. Halibut	*Paralicthys californicus*
White Croaker	*Genyonemus lineatus*
Shovelnose guitarfish	*Rhinobatos productus*

TABLE ML-2

Clam Hydroid	*Clytia bakeri*
Pacific Squid	*Loligo opalescens*
Purple Striped Jellyfish	*Pelagia noctiluca*
Sand Dollar	*Dendraster excentricus*
Purple Sailing Jellyfish	*Velella velella*
Recluz's Moon Snail	*Polinices reclusianus*
Sea Pansy	*Renilla kollikeri*
Giant Pacific Cockle	*Trachycardium muricatum*
Pismo Clam	*Tivela stultorum*
Bean Clam	*Donax sp.*

RECOMMENDATIONS

No additional data or research is warranted because of the lack of projected changes within the unit or adjacent marine environment. A concern is the existence of an oil outfall (Shell) which is located between Goldenwest street and the northerly municipal boundary.

The specific location of the point of discharge is latitude 33°40'06", longitude 118°10'16". The outfall is operating under the guidance of National Pollutant Discharge Elimination System (NPDES) Permit No. CA 0006485 which was issued by the California Regional Water Quality Control Board (RWQCB). Shell Oil is permitted to discharge a maximum of 16.5 MGD of treated oil field brines, stormwater runoff and specified oil brines under emergency conditions pursuant to this permit.

Furthermore, Shell Oil is required to submit daily monitoring reports on a weekly basis to the RWQCB pertaining to chemical constituents associated with the operation of the outfall.

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RESOURCE INVENTORY

ECOLOGY

STATE BEACH GENERAL PLAN

(City of Huntington Beach)

July 1987

by

Jack Easton

Biologist

Tierra Madre Consultants

ECOLOGY

INTRODUCTION

Information for this study was obtained through literature review and a field survey. Literature sources include the Final Environmental Impact Statement for the Pacific Coast Highway Widening Project, a computerized printout of the sensitive biological elements for the Long Beach 1 x 2 degree USGS quad from the California Natural Diversity Data Base, and regional biological field guides. Additionally, Jack Easton, biologist, spent five hours on June 23, 1987 performing the field survey.

ECOSYSTEMS

Terrestrial

Due to the extensive disturbance and surrounding urbanization, the ecosystem of the unit has been greatly simplified. The existing vegetation provides food and nest material for the resident population of ground dwelling mammals. Reptiles and birds feed on insects which are attracted to the local plant species. Gulls, shorebirds and common birds of urban areas feed on refuse left on the beach by human visitors and or local vegetation. Additionally, the unit's size does not allow it to be classified as an ecological entity. It does not contain a wetland or marine system. The Pacific Ocean is westerly and southerly adjacent to the unit. There are no unique features (e.g., bays, coves, lagoons, reefs, etc.) which would provide an area of study or interest.

ECOSYSTEM CLASSIFICATION

The project area is classified by the Public Resources Code as being in the coastal strip ecological region.

Ecological Influences

Site conditions of close proximity to the ocean, moderate climate, and intensive management for the heavy recreational pressure placed on the area are all influential on the local ecosystem.

RECOMMENDATIONS

In consideration of the disturbed condition of the site, the intensive recreational use patterns, and the limited number of resident species, we recommend no change in management activities in the area between the pier and Goldwenwest Street. If use and management patterns continue as they presently exist within this area, the local ecosystem will continue to function in its current state.

The area between Goldenwest Street and the northerly municipal boundary is absent of any installed landscape material. It is recommended that the existing bluff top park continue into and throughout this area. Additionally, specific walkways and access points should be delineated in order to prevent soil erosion and planting material deterioration.

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RESOURCE INVENTORY

CULTURAL RESOURCES

STATE BEACH GENERAL PLAN

(City of Huntington Beach)

July 1987

by

Frank L. Haselton

Director of Planning

Southwest Region

Barrett Consulting Group Inc.

CULTURAL RESOURCES

INTRODUCTION

There are four prehistoric occupation periods or "horizons" as defined by Murphy (1960) for the Southern California area. These horizons are as follows: Early Horizon (50,000 - 5,000 B.C.E.); Millingstone Horizon (5,000-1,500 B.C.E.); Intermediate Horizon (1500 B.C.E. - A.D. 800) and the late Horizon (A.D. 800-1542). Recorded and documented history of the unit's general area correlate with the maritime exploration of Juan Rodriquez Cabrillo in 1542. Along with Sebastian Vizcaino (1602) and Gasparo de Portola (1770), Euroamerican history developed. Land grants by Spain were made to Manuel Perez Nieto (1784) and subsequently divided among his relatives. Don Abel Stearns purchased land area containing the unit in 1852 for ranching purposes. Colonel Robert Northam purchased the unit and adjacent areas in 1885. Northam sold 1,500 acres to Philip Stanton in 1901 who organized a real estate syndication for the acquistion and development of the area. At this time, the unit became part of a town named Pacific City.

Stanton sold his interest to the Vail Gates Group out of Los Angeles. Henry Huntington, owner of Pacific Electric Railroad purchased the area in 1902 and established a railway link from the area to Long Beach and Newport Beach. The community's name changed to Huntington Beach in 1903 and incorporated in 1909.

In 1919, oil wells came into production to provide an impetus for both economic and population growth. The City has grown from 815 residents and 3.57 square miles (1910) to 184,280 residents and 27.7 square miles (1986).

The majority of the aforementioned information was obtained by cite searches involving written material and personal interviews. The primary difficulty in obtaining information for the unit is that the unit's size and configuration severely limits its historical scope. Additionally, the unit area did not appear to be intensely utilized by groups because of its vulnerability to wave erosion and adverse weather.

After significant research with the Huntington Beach Historical Commission, local libraries and local historians, the author has concluded that there is very little (if any) source material depicting the archaeology, anthropology and specific history of this area (specifically, the unit). Discussion of the unit's past has to be placed in larger geographical context (Orange County) for prehistoric purposes. Euroamerican history is dominated by vast ranchos and land holdings until the 1900's. With the advent of the railroad came real estate subdivisions, transactions and recordations which provide important foundations in assessing a community's history.

INVENTORY PROCEDURES

A. Previous Investigations - There is no apparent evidence that the unit has been surveyed for archaeological and paleontological purposes. Although areas within the general proximity of the unit (mesas) have identified sites, the unit itself does not appear to have been utilized for any specific purpose. Again, the unit has been subjected to severe natural erosion and physical alteration by the development of roads, railways, and oil exploration.

   The primary investigation was conducted through an exhaustive literature search that provided for the information in the subsequential pages. These studies ranged from ethnological texts (e.g. Kroeber and Johnston) to recent surveys conducted on areas adjacent to the unit (Archaeological Advisory Group). A complete reference list is included within this section.

B. Survey Report - The unit was surveyed on June 17, 1984 by BCG staff geologist for the purpose of finding any area within the unit that may have not been altered by environmental forces or construction activity. The unit was surveyed again on June 26, 1987 by BCG staff environmental planner--for the purpose of identifying any form of significant human activity prior to 1900. The coverage of both surveys were comprehensive in nature. These field surveys did not reveal any significant sites.

DESCRIPTIONS OF CULTURAL FEATURES

A. Archaeological Sites - As previously mentioned no sites have been or were identified within the unit. Therefore, no artifacts are available for curating purposes.

B. Standing Structure - The primary structure adjacent to the unit is the municipal pier. Originally constructed in 1904, it deteriorated and was replaced by the existing structure in 1914. It is 1,800 feet in length and is constructed of wood and reinforced concrete. The pier is intensely utilized for recreational purposes and has provided a focal point for the City of Huntington Beach's revitalization efforts.

CULTURAL HISTORY

Native American History

As previously mentioned, there are essentially four chronological periods or horizons that characterize the prehistoric element of the unit's area. The Early Horizon (50,000-5,000 B.C.E.) is introduced through the "Bering Land Bridge" concept. Although there have been claims for more ancient presence, the first confirmed evidence sites for people in Southern California is the

San Dieguito Complex which appeared approximately 10,000 years ago. These sites are almost inclusively within San Diego County. These people survived by hunting large game and gathering of natural plant life.

The Millingstone Horizon appeared around 5000 B.C.E. This period is characterized by finds from Santa Barbara to San Diego. Tools used for seed grinding (manos and metates) have been dated to this period. These grinding devices are believed to indicate a fundamental change portraying the use of tools for plant food sources. Although shellfish was a significant portion of the diet, plants became the dominant food source. Game hunting was still pursued providing for a diversification of subsistence. This diversification contributed to apparent sedentary settlements (as opposed to nomadic hunters and gathers) which began to appear during this horizon.

The Intermediate Horizon, which initiated around 1500 B.C.E. is characterized by an increasingly advanced set of tools (stone mortars and pestles) which, in turn, provided for greater reliance upon larger plant foods--specifically acorns. Kroeber postulated that the Hokan linguistic tribes were the dominant population. During the latter part of this horizon, Shoshonean Tribes filtered into the area which were a branch of the Uto-Aztechan culture. There is no apparent time or date that marks the displacement of the Hokan tribes with the Shoshonean tribes. Nor is there any evidence of forceful replacement between the Hokan and Shoshonean groups. The Shoshonean tribe essentially occupied an area that tapered from an expanse of 600 miles at the Nevada border to 100 miles along the California coast. The Yuman tribes occupied the area to the south while a complex network of diversified groups lived to the north.

The Late Horizon was indicated by the confirmed introduction of the Gabrielino Indians who were of the Shoshonean linguistic group. The Gabrielinos are termed in several texts as the Native Americans of the area. The Gabrielinos occupied an area from the Santa Monica Mountains to Aliso Creek and as far inland as the Cajon Pass.

Much of the information regarding the settlements and traditions of the Gabrielinos was recorded by Father Geronimo Boscana of the San Gabriel Mission. Although Cabrillo and Vizcaino noted smoke from numerous fires, they never landed their ships along the southern California coastline in this area. Instead, they sought refuge at Santa Catalina Island and the Channel Islands. Gaspar de Portola led his expedition through the general region in 1769, which introduced the first serious and long-term settlement of Euroamericans characterized by the missions.

It is estimated that approximately 5,000 Gabrielinos lived within the aforementioned territory at the time Portola arrived. The prominent village of the Gabrielinos was termed Puvunga which was

located approximately 8 to 10 miles northwesterly of the unit. This site is now located within what is known as the Bixby Ranch in Long Beach.

The Gabrielinos had a fairly complex society with a diversified economy. Subsistence was characterized by exploitation of maritime resources including deep sea fish species and mammals. Additionally, Gabrielinos acted as significant traders between the groups which occupied the islands and inland regions. The Gabrielinos had an extensive religious and social fabric that essentially focused on a single diety--Chungichnish. Rites included dancing, fasting, animal sacrifice and week long observances. Father Boscana recorded the common practice of cremation which may explain, in part, the lack of a traditional necropolis--areas that normally yield detailed archaeological finds.

The Gabrielinos were passive in nature and accepted the European (missions) infiltration. The primary focus was the Mission San Gabriel located approximately 30 miles north of the unit. Johnston records that the Gabrielinos were devasted by European diseases due the lack of immunity.

Although, the Gabrielinos did not completely vanish, their numbers were severly reduced. The remaining Gabrielinos settled near Mission San Gabriel and became a functional part of the Mission's economy.

EUROAMERICAN ERA HISTORY

The historic use of the unit began with the land grant of Rancho Las Bolsas to Manuel Perez Nieto in 1784 by the Spanish Governor Pedro Fages. This grant covered 21 square miles and was used for cattle grazing.

Nieto died in 1804 and thirty years later, his grant was divided among heirs. In 1834, Mexican Governor Jose Figueroa granted the general area to Catarina Ruiz. In 1841, an area consisting of six square miles was termed Bolsa Chica and granted to Joaquin Ruiz.

Don Abel Stearns who resided in Los Angeles since 1833 obtained ownership of Bolsa Chica and Las Bolsas in the mid 1850's. This acquisition allowed Stearns to become, the largest owner of land and cattle in southern California. Stearns died in 1877 and Stearns' successor, the Stearns Rancho Trust began to sell portions of the property.

The unit was part of an area called "Shell Beach" due to the large amount of bean clams. This beach included an area that rose sharply into bluffs that were subject to wave and tidal erosion. This area is essentially the subject unit. Inland from the bluffs was a mesa that was purchased by Colonel Robert Northam, a manager of the Stearns Rancho Trust.

In 1901, Philip Stanton formed a local syndicate and bought 1,500 acres of Rancho Las Bolsas from Robert Northam for the sum of $100,000. The syndicate organized the West Coast Land and Water Company and on a mesa above Shell Beach laid out streets and lots in a forty acre tract. It was Stanton's dream to build a town on the Pacific Coast that would rival Atlantic City on the east coast, and so the project was named Pacific City. A water system was installed, streets were paved, and a pavilion was built on the ocean front. To show signs of habitation, a church and residence were hauled in from the defunct town of Fairview. In drilling a well for domestic water, considerable gas came out of the hole, much to the annoyance of the promoters. In August 1901, the first lots were placed on the market with prices ranging from $100, to $200, each. A number were given away to persons who would agree to build some kind of structure immediately. In 1902, Philip Stanton sold his interest in Pacific City to the Vail-Gates Group of Los Angeles.

Henry E. Huntington, who owned the Pacific Electric Railroad and was a principal stock holder in the Southern Pacific Lines, became interested in Pacific City. His "red cars" were already running to Long Beach and the Southern Pacific owned the rails extending to Newport Beach. Buying an interest in the West Coast Land and Water Co., he extended his red car line along the ocean front from Long Beach and electrified the old railroad line to Newport Beach. A wooden pier was built into the ocean and on the bluff a two-story frame hotel, the Huntington Inn, was erected. An extensive advertising campaign drew attention to Huntington Beach and a real estate boom developed. Lots that had sold for $200 a year before sky-rocketed to $43,000. More land was added to the original townsite. The Huntington Beach Company, comprised mostly of Angelenos, had acquired the remaining holdings. The company's first president, J. V. Vickers, had been a director of the West Coast Land and Water Co., when Stanton headed the syndicate.

The City of Huntington Beach was incorporated February 17, 1909, with Ed Manning as the first Mayor. The original townsite consisted of 3.57 square miles, with a population of 915. There were 542 registered voters.

From 1910 to 1920 the City maintained a slow growth rate. The Huntington Beach Co. operated a ranch raising food grains on some of 1,400 acres they owned. In 1918, they held public land auctions to stay out of debt. The Encyclopedia Britannica Company negotiated a deal with the Huntington Beach Co. and purchased seven, five-acre tracts located 2 1/2 miles from the beach in the northwest section of Huntington Beach Co. property. They subdivided each five-acre tract into sixty lots resulting in 420 lots in all. These lots located inland, on hillsides and in ravines, were for the most part worthless.

In 1919, Standard Oil Company leased 500 acres of land from the Huntington Beach Co. The first oil well was drilled in what was then the northwest area of the City. This well was known as A-1 and was brought in during August, 1920, producing 91 barrels of oil a day. They continued to drill more wells on their lease and multitude of others moved in with hopes of finding a profitable oil well. Wells sprang up and in less than a month the town grew from 1,500 to 5,000 people.

On November 6, 1920, Standard Oil Co. brought in a significant well known as Bolsa Chica No. 1. An estimated 4,000,000 cubic feet of gas and 1742 barrels of oil were produced per day by this well alone. Standard Oil Co. shipped several hundred men from other fields into Huntington Beach to help contain the overflow of oil. Bolsa No. 1 proved that the Huntington Beach oil field was a most significant discovery and soon the population was over 7,000 persons. Areas as small as a City lot were leased and used for organizing oil corporations. Scores of them were formed and their stock put on the market. The old established oil companies continued to drill more wells. Each owner of an encyclopedia lot received an income of $100 a month. What appeared to have been a valueless gift of land resulted in fortunes of various amounts to its recipients. The bonanza continued several years.

In 1926, the area between 8th Street and 23rd Street, known as the town lot field, produced a second oil boom. The profits from oil were now available to the owners of these lots. Houses and other structures were moved for the purpose of obtaining oil.

In 1930, oil was discovered and produced from the tideland ocean pool utilizing the whipstock method. The development of this idea proved that oil from a known ocean pool lying off shore could be drilled from the upland by slant drilling, and in the process, preserve the beach and public recreation area. Currently, close to 500 whipstock wells produce approximately 10 million barrels of oil annually (1980). The wells within the unit are a part of this system.

The unit's other primary utilization is recreation. Pacific Coast Highway was completed in 1925 and provided direct access to the unit. Other than further public improvements and the construction of an apartment complex along the north side of the pier, the unit has remained unchanged. The City of Huntington Beach has placed some riprap along the bluffs from Goldenwest Street to Bolsa Chica in order to prevent wave and tidal erosion.

EVALUATION OF CULTURAL FEATURES

The construction of the municipal pier in 1904, and its subsequential reconstruction in 1914, represent the only significant structure (feature) near the unit (technically, the unit's southerly boundary terminates at the pier). The pier possesses structural, cultural, recreational and community design values.

Structurally, it is one of the longest piers (1,800 feet) along the southern California coastline. It has withstood severe storms that have periodically disabled specific portions. However, it has been maintained and utilized by several million people since its original construction. Culturally, the pier represents the era in which the City received its name and was the extension of Main Street into the ocean. The pier's constuction preceded the inception of the area's oil economy and is an element of Henry Huntington's real estate and railway promotional efforts.

The pier serves a recreational purpose for passive users or those fishing from it. Over 1 million people walk on the pier annually. It also allows for the creation of ocean floor conditions which, in turn, provide for waves for surfing.

The City of Huntington Beach has conceptualized a revitalization program for the downtown area. A central focus of the urban design theme is the pier. The pier will not only be a focus for design purposes, but also retain its functional purpose.

ZONES OF CULTURAL SENSITIVITY

The municipal pier represents the only structure (zone) that should be preserved. Policies and design strategies that comprise, in part, the adopted City of Huntington Beach Specific Plan have taken the pier into consideration and is utilizing it as a design focal point and functional node.

RESOURCE PROBLEMS

The primary obstacle in assessing cultural resources is the unit's configuration and size. It does not appear to have been intensely utilized in prehistoric times because of its geographic and topographic characteristics. As previously mentioned, a field survey revealed that the area has been subject to severe wave and tidal erosion, and construction activity associated with recreational and industrial use.

RECOMMENDATIONS

The unit should be adopted (in its entirety) as part of District 11 of the Downtown Specific Plan of the City of Huntington Beach. Therefore, it would maintain its primary function as a recreational area prohibiting construction of significant, adverse structures.

The municipal pier (District 10) should be preserved and should continue to serve as a design and function node for the downtown area.

Additionally, research or inventories would not reveal new finds or sites because the aforementioned geographic and topographic characteristics. However, in the event that an archaeological site is revealed during a construction process, work should cease until a full evaluation by a qualified archaeologist be completed. The policies stated within the City of Huntington Beach Coastal Element Conservation and Open Space Element, Recreation Element and and the Downtown Specific Plan direct the unit to be preserved for open space and recreational purposes. Enhancement would involve the continuation of the Bluff Top Park, the maintenance of lifeguard services and the facilitation of public access to the unit.

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RESOURCE INVENTORY

ESTHETICS RESOURCES

STATE BEACH GENERAL PLAN

(CITY OF HUNTINGTON BEACH)

July, 1987

BY

Frank L. Haselton

Director of Planning

Southwest Region

Barrett Consulting Group Inc.

ESTHETICS

INTRODUCTION

The primary method of collecting data for the unit was done by field reconnaissance that was documented by photographs. Secondary sources included existing environmental impact reports, environmental impact statements and a series of policies established by the City of Huntington Beach.

SCENIC RESOURCES

Positive Features

The unit is a scenic resource comprised of several elements. The entire unit provides a panoramic perspective of the Pacific Ocean. Santa Catalina Island is located approximately 30 miles offshore and is visible much of the time. The unit's area between the municipal pier and Goldenwest Street is relatively flat and with ample access to the water edge. An additional scenic resource is the pier itself that is visible from all areas within the unit.

The area between Goldenwest Street and the unit's northerly boundary is characterized by bluffs with difficult access to the beach. This bluff area is not improved with any recreation facilities except with an asphalt path that is adjacent to Pacific Coast Highway. However, these bluffs provide vista points towards the ocean and along the coastline.

The ocean meterological characteristics provide a variety of scenic attributes. The surface is often calm and reflective. However, northern winter storms create an impetus for large surf during winter months. Sunsets along the unit's area are picturesque when the northerly coastline and Santa Catalina Island is silhouetted. Figure ER-1 illustrates some of the aforementioned characteristics.

Negative Features

The bluffs that are within the unit have been subjected to tidal and wave erosion. The unit's area between Goldenwest Street and the northerly boundary has large amounts of riprap and concrete slabs placed between the water and the bluff. Reinforced steel bars, rusted pipes and miscellaneous concrete material is highly visible. This area of the unit has bluffs that are not improved for recreation purposes. The top of the bluffs are void of vegetation and evidence of erosion and soil breakdown is apparent. There are a series of oil pumps within fenced areas. Some of these areas have had pumps removed, yet the fencing and ancillary equipment remains. There is a service road that has an asphalt base that connects these oil pumps.

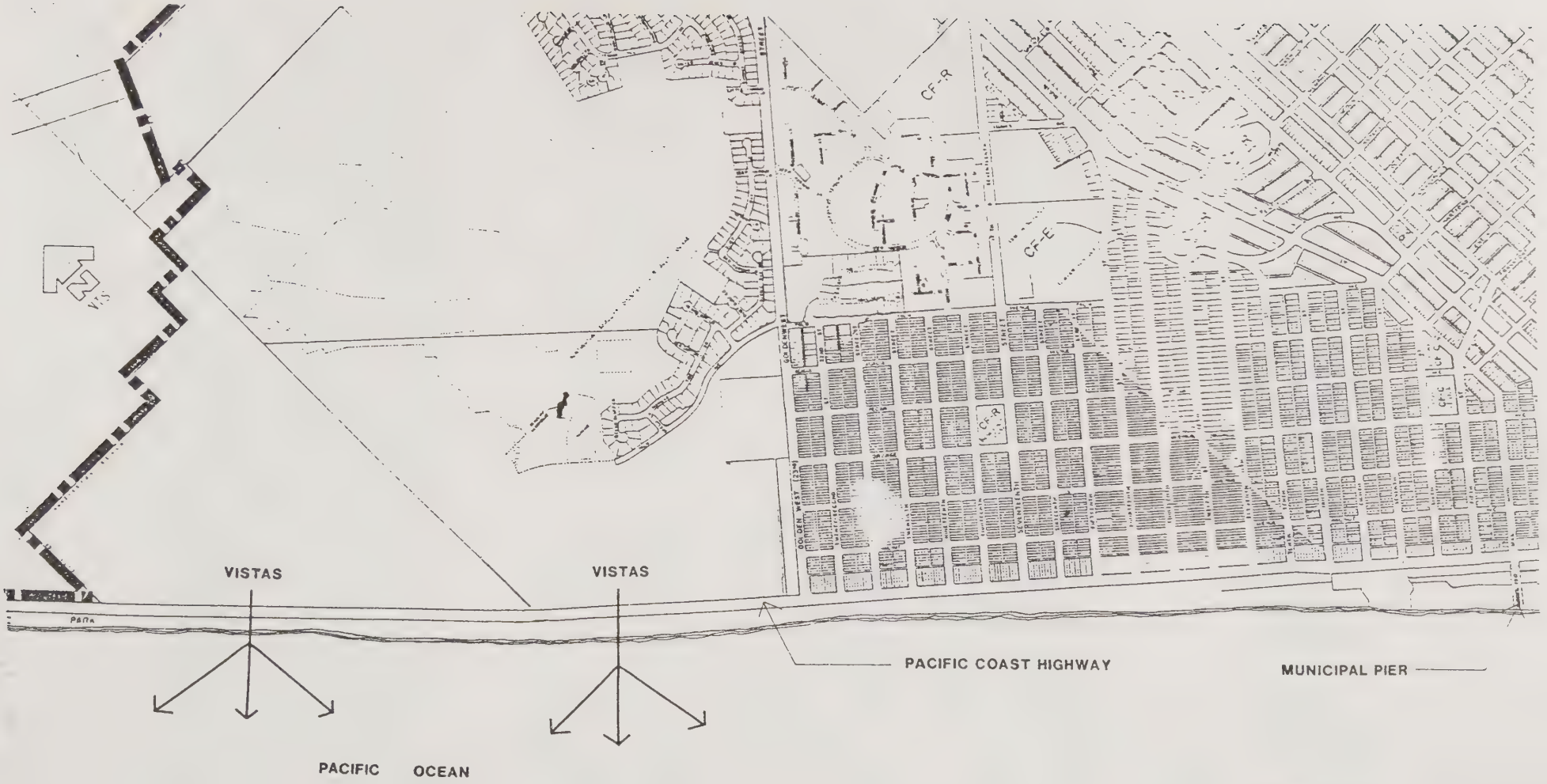


FIGURE ER-1

SCENIC RESOURCES
POSITIVE FEATURES

BARRETT CONSULTING GROUP INC.

The unit area between the municipal pier and Goldenwest Street has an improved bluff top park. However, there is a series of oil pumps between the bluff and the beach area. A service road connects these pumps. There is a concrete wall that retains the bluff. This wall has been the object of graffiti. The surface of the wall has cracks and is in need of painting. There are overhead utility lines throughout this area. Additionally, there are portable toilets scattered along the service road. Figure ER-2 portrays the negative scenic elements.

EVALUATION OF SCENIC RESOURCES

The unit is a scenic resource that provides opportunity to view expanded resources such as the ocean, coastline and Santa Catalina Island. The unit enjoys reasonable access along its entire boundaries. The panoramic views whether from the beach or the bluffs, are a value and warrant preservation. The unit could be classified as a single zone of scenic importance. That is, it existing positive characteristics should be preserved while the negative characteristics should be eliminated or avoided. The northerly area provides a potential for recreational and panoramic purposes. However, there are no improvements except for oil pumps, a poorly maintained surface road and an asphalt bicycle/pedestrian trail.

The bluff top park between the municipal pier and Goldenwest Street has overhead utility lines adjacent to the palm trees planted along the park. Also, there are overhead utility lines between the bluff and the beach. These lines create a conflict in the panoramic views of the ocean and coastline. There are oil pumps visible from between the beach and the bluff area. Although, there have been attempts to screen these pumps, their presence creates an inconsistent element within an outdoor recreational area.

AUDITORY RESOURCES

Positive Features

The presence of the ocean provides for the auditory resource of waves and wind. Although, this is not primary habitat for wildlife, birds are heard throughout the day while in transit from one site to another. These features are enjoyed the most during early morning or late afternoon and evening hours.

The prominence of these auditory features vary during different seasons. The winter and autumn months do not experience the amount of visitors as the spring and summer months; therefore, providing less conflicting noise.



RIPRAP (CONCRETE, METAL PIPE, ETC)

OIL PUMPS (MAY DENOTE MORE THAN ONE PUMP)

OVERHEAD UTILITIES

CONCRETE WALL (GRAFITTI)

FIGURE ER-2

SCENIC RESOURCES NEGATIVE FEATURES

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Negative Features

The unit's proximity to Pacific Coast Highway exposes it to a significant source of noise generation. Approximately 40,800 vehicles per day travel along Pacific Coast Highway during peak months while approximately 35,000 vehicles per day use Pacific Coast Highway during non peak months. The recently completed Environmental Impact statement for the widening of Pacific Coast Highway (Caltrans- SCH 80121150) designates the unit to be in Activity Category C. This Activity Category normally includes a maximum of level of 72 dBA (exterior) and includes developed lands. Activity Category B involves a lower maximum sound level 67 dBA and includes recreation areas. The unit's actual sound measurements indicated a maximum of 65 dBA (1981). However, projected traffic improvements and increases will elevate the sound level to 68 dBA by the year 2000.

Sound barriers could be constructed, however, there would be an immediate negative visual impact.

Evaluation

The unit's size and configuration severely limits identifying zones of auditory importance and mitigation measures. The negative noise impacts are greater along the bluffs adjacent to Pacific Coast Highway as opposed to the beach area. There is a definite conflict between the bluff top park and Pacific Coast Highway in the terms of noise impacts.

Additionally, the amount of people that visit the beach during peak months increases the noise level by the presence of voices and radios.

RECOMMENDATION

The bluffs between Goldenwest Street and the unit's northerly boundary should be improved with the continuation of the existing bluff top park. Efforts should be made to maintain a separation between vehicular and pedestrian and bicycle (non vehicular) circulation. Panoramic or vista parks should be established along the bluff to encourage enjoyment of the exisitng scenic resources.

Oil wells/pumps should be consolidated or eliminated if not in production. Remaining oil wells/pumps should be screened to reduce the visual impacts. The service road should be maintained.

Overhead utilities should be replaced with underground facilities. Off-street parking should be provided where there is sufficient area and a maximum degree of safety can be assured. Radios and other similar noise generators should be either prohibited or strictly controlled.

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RESOURCE INVENTORY

RECREATION RESOURCES

STATE BEACH GENERAL PLAN

(CITY OF HUNTINGTON BEACH)

July, 1987

By

Frank L. Haselton

Director of Planning

Southwest Region

Barrett Consulting Group

RECREATION

RECREATION ACTIVITIES

The unit serves a local and regional recreation need. The unit has historically provided an area for recreation because of its accessibility. Access to the beach area at the northerly end of the unit is predicated upon the tide. At high tide the water reaches the bottom of the bluffs precluding any use of the beach area. The remaining of the unit's beaches have ample access.

Historically and currently, the unit has been utilized for general beach activities including swimming, surfing, fishing and other recreational activities. The City of Huntington Beach has installed a bluff top park from the pier to approximately Goldenwest Street. This park has not only enhanced the streetscape along Pacific Coast Highway, but has provided for safe bicycle and pedestrian circulation away from vehicular traffic.

Attendance records have been maintained for the entire Bolsa Chica State Beach of which the unit is currently a portion. The Bolsa Chica State Beach is approximately six miles in length while the subject unit is approximately 2.3 miles in length. In 1978, the annual attendance for the Bolsa Chica State Beach was 1,860,313. The average attendance for a summer weekday was 6,691 and for a summer weekend day was 24,471 in that same year. The beach attendance exceeded 2 million people in 1986. The approximate average attendance for a summer weekday was 7,500 and for a summer weekend day was 27,500 people.

The Environmental Management Agency (EMA) of the County of Orange published a report in 1979 that projected a doubling of the 1978 attendance by the year 1995. Bolsa Chica State Beach ranked fifth out of a total of 20 Orange County beaches with highest usage in 1977/78.

As previously mentioned, the unit serves a regional need. Approximately 74 percent of the unit's visitors are from outside of Orange County.

The unit's activity can be characterized as destination oriented. That is, it is utilized for a series of recreational purposes because of the sand, water, and its general location. Both passive and active types of recreation characterize its usage. Essentially, it can (and does) accommodate large groups of people for a variety of purposes. The unit experiences intense activity and use during the summer months, specifically on weekends. The activity level drops noticeably during the autumn and winter seasons.

The unit has ample and direct access to Pacific Coast Highway and adjacent neighborhoods. There is on-street parking along all areas within the unit. This is further facilitated by pedestrian stairways between the pier and Goldenwest Street. There are no stairways between Goldenwest Street and the northerly boundary of the unit.

There are possible hazards associated with storm surf, primarily during the autumn and winter months. Riptides and undertows present a constant concern for swimmers and surfers. As previously mentioned, there is a degree of hazard associated with access down the bluff areas between Goldenwest Street and the northerly boundary of the unit.

RECREATION FACILITIES

Currently, the primary recreation facilities consist of a parking lot northerly adjacent to the pier, a bluff top park with bicycle and pedestrian trail, picnic tables, a concession stand, and the general beach area.

Specifically, the parking lot that is adjacent to the north side of the pier has a capacity for approximately 330 cars. Additional on-street metered parking is provided along Pacific Coast Highway (approximately 525 spaces). The bluff top park extends from the pier to a point northerly of the intersection of Pacific Coast Highway and Goldenwest Street. The park is along the southwesterly side of Pacific Coast Highway and consists of a paved path flanked by irrigated turf and clusters of palm trees. At approximate 1,000 foot intervals there are areas for bicycle racks, panoramic platforms and pedestrian access via stairways to the beach area. Currently, there are portable toilets located at approximate intervals of 250 to 300 feet. There are eleven lifeguard towers to assure swimmer safety.

Although, the municipal pier is technically outside of the unit, it is the principal recreational structure in the area. It directly provides for fishing and sightseeing, and indirectly provides for an area where waves can be utilized by surfers. There are restaurants and a fishing tackle store on the pier. The primary lifeguard tower is located on the pier.

Figure RR-1 illustrates the location and number of the aforementioned facilities.

RECREATION POTENTIAL

The unit's area from Goldenwest Street to the City's northerly boundary is undeveloped except for a bicycle and pedestrian path that parallels Pacific Coast Highway. This portion of the unit could provide sufficient area along the bluff top for both vehicular (including parking) and pedestrian access. The primary concern would be direct access to the beach. The bluffs, although not extensively high, are steep and the siting of



NORTH SIDE OF PIER PARKING (330 SPACES)

BLUFF TOP PARK

CONCESSION STAND (SUNNY'S)

GENERAL BEACH AREA

LIFEGUARD TOWERS

FIGURE RR-1

RECREATION FACILITIES

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stairways is awkward due to the water reaching the bottom of the bluffs at the various times. That is, stairway access would only be feasible during low tides.

Northerly of the unit is Bolsa Chica State Beach. It is developed with parking areas, vehicle, pedestrian and bicycle circulation systems and support facilities. Bolsa Chica State Beach is controlled by the State of California Department of Parks and Recreation.

The undeveloped portion of the unit serves as a connecting link between the City's and the State's beaches. Therefore, any plans and subsequent actions pertaining to this 1.3 mile strip should have a consistent theme both in design and function with the existing State and City beaches' facilities.

It is essential to consider these alternatives because the unit does serve as a regional recreational element. The unit will continue to experience population and useage. Therefore, any improvements will be in response to an existing need as opposed to developing a potential use.

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STATE BEACH GENERAL PLAN

SUBMITTED TO THE

CITY OF HUNTINGTON BEACH

AUGUST 1987

Barrett Consulting Group Inc.

3184-K Airway Avenue Costa Mesa, CA 92626 714/545-4335 Telex No. 314583

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INTRODUCTION

Project Description

The project is known as the State Beach - City of Huntington Beach. It was formerly a portion of the Bolsa Chica State Beach. The unit is located between the Huntington Beach Municipal Pier and the City of Huntington Beach northerly municipal boundaries. It is between Pacific Coast Highway and the Pacific Ocean. It is approximately 2.3 miles in length and encompasses approximately 100 acres. Figures 1 and 2 depict the unit's local and regional setting, respectively.

The unit is within the County of Orange and lies between the Bolsa Chica State Beach and the City of Huntington Beach Municipal Beach. Nearby communities include Fountain Valley, Newport Beach, Westminster and Seal Beach. The most prominent geographical entity is the Pacific Ocean that is southerly and easterly adjacent to the unit.

Another prominent landmark is the Bolsa Chica Wetlands that are located to the northeast of the subject unit. The wetlands have been the subject of thorough analyses, development alternatives and state legislation. The unit is located within the Coastal Strip landscape province, and specifically in a zone designated as an area between the Mexico border and Point Conception. The unit has direct access to and from Pacific Coast Highway along its entire length. Pacific Coast Highway has on-street parking along the oceanward side. Additional parking lots are located near the municipal pier between the beach and Pacific Coast Highway. There are a series of major arterials that terminate into Pacific Coast Highway which directly facilitate traffic from population areas to the unit. These arterials include Warner Avenue, Goldenwest Street and Beach Boulevard. The nearest freeway is the San Diego Freeway (S.R. 405) which is approximately five (5) miles from the unit.

The unit is adjacent to the large population centers of Orange County and is approximately 30 to 40 minutes of driving time away from the Los Angeles area. Pacific Coast Highway is served by the Orange County Transit District (OCTD) and has several bus stops adjacent to the unit. Primarily, the unit is served by OCTD Routes No. 25 and 29. The nearest airport is the John Wayne Airport which is located approximately 10 miles to the southwest. The Long Beach Airport is located approximately 30 miles to the northeast. The Los Angeles International Airport is located approximately 40 miles to the north.

The City of Huntington Beach has assumed responsibility of this area from the State of California which has resulted in the reclassification of the unit. In assuming this responsibility,

the City plans to continue its recreational improvements from Goldenwest Street to the northerly municipal boundary.

As previously mentioned, the unit is relatively small (100 acres) and has a long, narrow configuration. It is primarily composed of a beach area and a bluff area. At the southerly end of the unit, the beach area occupies the majority of the unit. As the unit extends northward, the beach area diminishes and the bluff area increases in width. The unit is occupied by a pier side parking area, a multiple family development, a concession stand, a series of oil pumps and a bluff top park between the municipal pier and Goldenwest Street. From Goldenwest Street to the northerly municipal boundary, the unit is void of improvements with the exception of some oil pumps and an asphalt bicycle/ pedestrian path.



UNIT AREA

FIGURE 1

UNIT LOCATION (LOCAL)

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FIGURE 2

UNIT LOCATION (REGIONAL)

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RESOURCE ELEMENT

PURPOSE

The purpose of this Resource Element is to establish goals, objectives and policies in order to preserve, enhance and encourage the recreational use of the unit. It includes the Resource Summary of the unit and provides direction for the Resource Management Policies and the General Plan of the unit. The specific programs and details for implementing these management policies will follow general plan approval.

In addition, this element identifies specific resource sensitivities and physical constraints, and establishes guidelines for acceptable levels of development and use with respect to these values.

The Resource Element is organized into two parts. The first part includes a brief summary of unit resources. More detailed information of these subjects is available in the Resource Inventory, on file with the State Department of Parks and Recreation and the City of Huntington Beach.

The second part of the Resource Element is the policy portion of the document, which begins with unit classification as a state beach, then builds on this foundation, arriving at specific resource management policies.

Inventory Summary

This is a summary of the unit's resources. More information is on file with the State Department of Parks and Recreation and the City of Huntingjton Beach in the form of the Resource Inventory.

Natural Resources

Topography

The site of the 100-acre unit is near the southwestern onshore termination of the Newport-Inglewood structural zone. The unit's area extends from Pacific Coast Highway oceanward to the Ordinary High Water Mark. The local features affecting the topography of the park area are the Santa Ana Gap, Huntington Beach Mesa, the Bolsa Gap, and the shoreface itself. Elevations range between sea level and a maximum of 12 meters (40 feet) above sea level. The steepest elevations are encountered in the bluff area at the northwest end of the unit. Slopes range from 0 percent to nearly vertical.

Meteorology

The unit experiences a Mediterranean semi arid steppe climate. Additionally, the unit's area is strongly influenced by the moderating effects of the ocean. The temperature regime is moderate. The average summer temperature is 21°C (67°F). The average winter temperature is 17°C (55°F).

Precipitation averages 28.7 cm (11.4 inches) per year. The rainy season extends from November to April, when greater than 90 percent of the annual rainfall occurs.

The presence of the marine layer results in moist air near the land surface along the coast. Over the ocean, the cool moist air results in a fog layer which recedes seaward during late morning and afternoon, and moves onshore during late afternoon and evening. The fog encroaches onto the land more frequently in spring and summer months due to greater temperature variations between the ocean and land.

Hydrology

The primary watershed affecting the unit is the Santa Ana River which currently discharges into the Pacific Ocean south of the unit. The Santa Ana River has water primarily between November and April.

The unit lies within the northeastern portion of the Orange County groundwater basin, where groundwater is contained in a series of pressured aquifers. These aquifers include the following:

- a semi perched zone;
- The Bolsa Aquifer;
- The Talbert Aquifer;
- The Upper Pleistocene Semi-Perched Zone;
- The Alpha Aquifer;
- The Beta Aquifer;
- The Lambda Aquifer;
- The Meadowlark Aquifer;
- The Main Aquifer;
- The Lower Zone; and
- The Upper Pliocene Deposits.

The primary source of water for the unit is derived from the Main Aquifer. This Aquifer ranges from 150 to 250 feet in thickness and its base reaches a maximum elevation of 350 feet below mean sea level.

Geology

The subject unit lies near the northwestern flank of the Peninsular Ranges geomorphic province of southern California. The Peninsular Ranges province includes the Los Angeles structural basin, the offshore area known as the Continental Borderland, the Santa Ana Mountains and the rest of the Peninsular Ranges to the south, and extends from near latitude 34° North in the Los Angeles basin to the tip of the Baja California peninsula. Characterized by elongated northwest-trending mountain ridges separated by straight-sided sediment-floored valleys, the province has been uplifted, tilted seaward and sliced longitudinally into subparallel blocks by young, steeply dipping faults. These northwest to west-northwest trending fault zones separate large elongated blocks of different structural elevation which are terminated at their northwestern margin by the east-west trending structures of the Transverse Ranges province. The major faults appear to be late Cenozoic in age, and many are seismically active. The Newport-Inglewood structural zone is one of the major northwest trending structural elements of the northern portion of the Peninsular Ranges province. The onshore extent of the zone runs from the mouth of the Santa Ana River, just south of the subject unit, northwest to Beverly Hills.

The unit lies within the regional structural trough known as the Los Angeles basin. Non-marine to bathyal marine upper Cretaceous, Tertiary and Quaternary sediments deposited on crystalline rocks of both oceanic and continental basement compose the stratigraphic sequence of the basin. Strata consist primarily of conglomerates, sandstones, sands, shales, and mudstones. Sediments were derived from the north and east except

during middle Miocene time when oceanic highlands are thought to have shed clastics from the south. The basin, which is bounded on the north by the San Gabriel and San Bernardino Mountains, on the south by the Pacific Ocean, and on the west and the east by the Santa Ana Mountains and San Joaquin Hills, is approximately 45 miles wide by 65 miles long. Geophysical studies show the total depth of the basin to be over 30,000 feet.

The oldest geologic formation is known as the Catalina Schist which ia a foliated metamorphic crystalline rock found at depths of up to 15,000 feet. The Miocene Topanga Formation overlies the Catalina Schist. It consists of an alternating sequence of gray, medium-to coarse grain sandstone interbedded with gray siltstone and sandy siltstone. The next series is the Puente Formation which consists of sands, silts and clays of late Miocene Age. The Fernando Formation (informally known as the Repetto and Pico formations) overlies the Puente Formation. It is Pliocene age strata that consists of greenish-gray micaceous siltstone, sandy siltstone, fine grained sandstone and varying amounts of interedded gray medium- to coarse-grained sandstone. The San Pedro Formation is composed of shallow marine deposits. It is composed of silt, clay sand and gravel and is exposed in limited outcrops at the margins of the mesa area that is southeast of the unit. The Lakewood Formation consists of shallow marine, intertidal and continental deposits. It is exposed at the surface on the Huntington Beach Mesa which is easterly of the unit. Recent deposits within the unit include alluvial gravels, sands, silts, marsh deposits, and beach sands. Recent beach deposits form narrow strips fringing wave-cut sea cliffs of the relatively soft Pleistocene sediments of the coastal mesa.

There are several fault zones which could (and do) affect the unit. The primary fault is the Newport-Inglewood Fault Zone. The zone is characterized by lateral strike slip movement which dips steeply to the southwest beneath the ocean.

The unit is within a geological active area due to faulting and folding, continental tectonics, and wave and tidal erosion.

Soils

There are essentially three soil types found within the unit. They are all classified within the Myford Association. The soil types, as classified by the U. S. Department of Agriculture Soil Conservation Service and Forest Service, are Beaches, Marina Loamy Sand - 0 to 2 percent slope, and Marina Loamy Sand - 2 to 9 percent slope. The erosion hazard ranges from slight to moderate assuming bare soil. Erosion occurs as a result of wave and tidal activity, pedestrian traffic and periodic precipitation. The unit lies within the San Pedro littoral cell. Sediments are transported southeasterly and eventually offshore through the Newport Submarine Canyon.

Plant Life

Approximately 25 species of plants representing 9 families have been identified within the unit. Twelve of these species are non-native to the area. The existing community is a mix of introduced species and remnant species of the native coastal strand community. It appears that most of the existing vegetation was planted for slope stabilization purposes and for esthetic effect.

No rare or endangered plants have been found in the unit.

Animal Life

The amount of animal life within the unit is severly limited due to its configuration, size and intensive recreational use. The primary mammal within the unit is the California ground squirrel (Spermophilus beecheyi). The side-blotched lizard (Uta stansiburiana) is the only noticeable reptile observed within the unit.

There are a variety of shorebirds and gulls that migrate through the area. However, the unit does not contain nesting or prominent feeding areas. There are two endangered species, as listed by the U. S. Fish and Wildflife Service, which migrate through the unit. They are the California Least Tern (Sterna atillarum browni) and the California brown pelican (Pelecanus occidentalis californicus).

Marine Life

The unit's nearshore marine habitat is not distinguished by lagoons, kelp beds, bays, or river months. It is exposed and directly affected by open surf. The fish community includes surf oriented species ranging from Jacksmelt (Atherminoosis californiensis) to California Halibut (Paralicthys californicus). The invetebrate population is a seasonal community that range Purple striped jellyfish (Pelagia noctiluca) to the Pismo clam (Tivela stultorum).

Phytoplankton occurs near the surface zone in neritic biotic communities. It is well documented that phytoplankton is a basic unit in earth's life support system. Phytoplankton provides for most of the atmospheric oxygen and serves as a basis of most marine food webs.

Ecology

The unit is within the coastal strip ecological region as designated by the Public Resources Code. Site conditions of close proximity to the ocean, moderate climate and intensive human use are all influential on the local ecosystem.

Due to the extensive disturbance and surrounding urbanization, the ecosystem of the unit has been greatly simplified. The existing vegetation provides food and nest material for the resident population of ground dwelling mammals. Reptiles and birds feed on insects which are attracted to the local plant species. Gulls, shorebirds and common birds of urban areas feed on refuse left on the beach by human visitors and or local vegetation. Additionally, the unit's size does not allow it to be classified as an ecological entity. It does not contain a wetland or marine system. The Pacific Ocean is westerly and southerly adjacent to the unit. There are no unique features (e.g., bays, coves, lagoons, reefs, etc.) which would provide an area of study or interest.

Cultural Resources

Archaeological Sites

There are no known archaeological sites within the unit. This is probably due, in part, to natural erosion activity and intensive industrial and recreational use.

Standing Structures

The primary structure adjacent to the unit is the municipal pier. Although, the pier is technically outside of the unit's boundaries, it has a significant visual and functional effect on the unit. Originally constructed in 1904, it was reconstructed in 1914 and currently exists as 1800 foot structure.

Ethnographic and Historical Background

Southern California cultural traditions prior to 5000 B.C.E. are not well defined for Orange County and the specific unit.

By about 5,000 B.C., it appears that a relatively uniform cultural tradition existed on the coast from Santa Barbara south to San Diego. Most archaeologists call this subsistence pattern the Millingstone Horizon. This era centered around the collection of small, wild seeds and shellfish. The additive Campbell Tradition developed out of the Millingstone Horizon by about 3,000 B.C. in Santa Barbara, a little later in the Ventura area, and still later in parts of Los Angeles and Orange Counties. The Millingstone Tradition seems to have continued until 500-700 A.D. along the Orange and San Diego County coasts, when it was replaced by a cultural tradition identified by archaeologists as the last prehistoric time period.

The Millingstone Horizon is identified in part by large projectile points, the use of milling stones (mano/metate), and largely undifferentiated chip stone tool assemblage. The late prehistoric tradition has two tool phases. The early phase is marked by the introduction of small, triangular projectile points (desert side-notched points), addition of the mortar and pestle

to the milling assemblage, shell beads, shellfish fish hooks, varied bone tools, so-called donut stones (use of which is not positively known), and a much broader array of ornamentation than the earlier Millingstone Horizon. The principal "late" prehistoric artifact addition is the manufacture and use of pottery. Both of these late traditions continue up to Hispanic contact in the latter part of the 17th and early part of the 18th centuries.

The primary people were of the Shoshonean linguistic group. The Gabrielinos were part of the Shoshonean group which inhabited the area.

Much of the information regarding the settlements and traditions of the Gabrielinos was recorded by Father Geronimo Boscana of the San Gabriel Mission. Although Cabrillo and Vizcaino noted smoke from numerous fires, they never landed their ships along the southern California coastline in this area. Instead, they sought refuge at Santa Catalina Island and the Channel Islands. Gaspar de Portola led his expedition through the general region in 1769, which introducted the first serious and long-term settlement of Euroamericans characterized by the missions.

It is estimated that approximately 5,000 Gabrielinos lived within the aforementioned territory at the time Portola arrived. The prominent village of the Gabrielinos was termed Puvunga which was located approximately 8 to 10 miles northwesterly of the unit. This site is now located within what is known as the Bixby Ranch in Long Beach.

The Gabrielinos had a fairly complex society with a diversified economy. Subsitence was characterized by exploitation of maritime resources including deep sea fish species and mammals. Additionally, Gabrielinos acted as significant traders between the groups which occupied the islands and inland regions. The Gabrielinos had an extensive religious and social fabric that essentially focused on a single diety--Chungichnish. Rites included dancing, fasting, animal sacrifice and week long observances. Father Boscana recorded the common practice of cremation which may explain, in part, the lack of a traditional necropolis--areas that normally yield detailed archaeological finds.

The Gabrielinos were passive in nature and accepted the European (missions) infiltration. The primary focus was the Mission San Gabriel located approximately 30 miles north of the unit. Johnston records that the Gabrielinos were devasted by European diseases due the lack of immunity.

Although, the Gabrielinos did not completely vanish, their numbers were severly reduced. The remaining Gabrielinos settled near Mission San Gabriel and became a functional part of the Mission's economy.

The historic use of the unit began with the land grant of Rancho Las Bolsas to Manuel Perez Nieto in 1784 by the Spanish Governor Pedro Fages. This grant covered 21 square miles and was used for cattle grazing.

Nieto died in 1804 and thirty years later, his grant was divided among heirs. In 1834, Mexican Governor Jose Figueroa granted the general area to Catarina Ruiz. In 1841, an area consisting of six square miles was termed Bolsa Chica and granted to Joaquin Ruiz.

Don Abel Stearns who had resided in Los Angeles since 1833 obtained ownership of Bolsa Chica and Las Bolsas in the mid 1850's. This acquisition allowed Stearns to become, the largest owner of land and cattle in southern California. Stearns died in 1877 and Stearns' successor, the Stearns Rancho Trust began to sell portions of the property.

The unit was part of an area called "Shell Beach" due to the large amount of bean clams. This beach included an area that rose sharply into bluffs that were subject to wave and tidal erosion. This area is essentially the subject unit. Inland from the bluffs was a mesa that was purchased by Colonel Robert Northam, a manager of the Stearns Rancho Trust.

In 1901, Philip Stanton formed a local syndicate and bought 1,500 acres of Rancho Las Bolsas from Robert Northam for the sum of $100,000. The syndicate organized the West Coast Land and Water Company and on a mesa above Shell Beach laid out streets and lots in a forty acre tract. In drilling a well for domestic water, considerable gas came out of the hole, much to the annoyance of the promoters. In August 1901, the first lots were placed on the market with prices ranging from $100, to $200, each. A number was given away to persons who would agree to build some kind of structure immediately. In 1902, Philip Stanton sold his interest in Pacific City to the Vail-Gates Group of Los Angeles.

Henry E. Huntington, who owned the Pacific Electric Railroad and was a principal stock holder in the Southern Pacific Lines, became interested in Pacific City. His "red cars" were already running to Long Beach and the Southern Pacific owned the rails extending to Newport Beach. Buying an interest in the West Coast Land and Water Co., he extended his red car line along the ocean front from Long Beach and electrified the old railroad line to Newport Beach. A wooden pier was built into the ocean and on the bluff a two-story frame hotel, the Huntington Inn, was erected. An extensive advertising campaign drew attention to Huntington Beach and a real estate boom developed. Lots that had sold for $200 a year before sky-rocketed to $43,000. More land was added to the original townsite. The Huntington Beach Company, comprised mostly of Angelenos, had acquired the remaining holdings. The company's first president, J. V. Vickers, had been a director of the West Coast Land and Water Co., when Stanton headed the syndicate.

The City of Huntington Beach was incorporated February 17, 1909, with Ed Manning as the first Mayor. The original townsite consisted of 3.57 square miles, with a population of 915. There were 542 registered voters.

From 1910 to 1920 the City maintained a slow growth rate. The Huntington Beach Co. operated a ranch raising food grains on some of 1,400 acres they owned. In 1918, they held public land auctions to stay out of debt.

In 1919, Standard Oil Company leased 500 acres of land from the Huntington Beach Co. The first oil well was drilled in what was then the northwest area of the City. This well was known as A-1 and was brought in during August, 1920, producing 91 barrels of oil a day. They continued to drill more wells on their lease and multitude of others moved in with hopes of finding a profitable oil well. Wells sprang up and in less than a month the town grew from 1,500 to 5,000 people.

On November 6, 1920, Standard Oil Co. brought in a significant well known as Bolsa Chica No. 1. An estimated 4,000,000 cubic feet of gas and 1742 barrels of oil were produced per day by this well alone. Standard Oil Co. shipped several hundred men from other fields into Huntington Beach to help contain the overflow of oil. Bolsa No. 1 proved that the Huntington Beach oil field was the most significant discovery and soon the population was over 7,000 persons. Areas as small as a City lot were leased and used for organizing oil corporations. Scores of them were formed and their stock put on the market. The old established oil companies continued to drill more wells.

In 1926, the area between 8th Street and 23rd Street, known as the town lot field, produced a second oil boom. The profits from oil were now available to the owners of these lots. Houses and other structures were moved for the purpose of obtaining oil.

In 1930, oil was discovered and produced from the tideland ocean pool utilizing the whipstock method. The development of this idea proved that oil from a known ocean pool lying off shore could be drilled form the upland by slant drilling, and in the process, preserve the beach and public recreation area. Currently, close to 500 whipstock wells produce approximately 10 million barrels of oil annually (1980). The wells within the unit are a part of this system.

The unit's other primarly utilization is recreation. Pacific Coast Highway was completed in 1925 and provided direct access to the unit. Other than further public improvements and the construction of an apartment complex along the north side of the pier, the unit has remained unchanged. The City of Huntington Beach has placed some riprap along the bluffs from Goldenwest Street to Bolsa Chica in order to prevent wave and tidal erosion.

Esthetics Resources

The unit is a scenic resource comprised of several elements. The entire unit provides a panoramic perspective of the Pacific Ocean. Santa Catalina Island is located approximately 30 miles offshore and is visible much of the time. The unit's area between the municipal pier and Goldenwest Street is relatively flat with ample access to the water edge.

The area between Goldenwest Street and the unit's northerly boundary is characterized by bluffs with difficult access to the beach. This bluff area is not improved with any recreation facilities except with an asphalt path that is adjacent to Pacific Coast Highway. However, these bluffs provide vista points towards the ocean and along the coastline.

The ocean meterological characteristics provide a variety of scenic attributes. The surface is often calm and reflective. However, northern winter storms create an impetus for large surf during winter months. Sunsets along the unit's area are picturesque when the northerly coastline and Santa Catalina Island is silhouetted.

The bluffs that are within the unit have been subjected to tidal and wave erosion. The unit's area between Goldenwest Street and the northerly boundary has large amounts of riprap and concrete slabs placed between the water and the bluff. Reinforced steel bars, rusted pipes and miscellaneous concrete material is highly visible. This area of the unit has bluffs that are not improved for recreation purposes. The top of the bluffs are void of vegetation and evidence of erosion and soil breakdown is apparent. There are a series of oil pumps within fenced areas. Some of these areas have had pumps removed, yet the fencing and ancillary equipment remains. There is a service road that has an asphalt base that connects these oil pumps.

The unit area between the municipal pier and Goldenwest Street has an improved bluff top park. However, there is a series of oil pumps between the bluff and the beach area. A service road connects these pumps. There is a concrete wall that retains the bluff. This wall has been the object of graffiti. The surface of the wall has cracks and is in need of painting. There are overhead utility lines throughout this area. Additionally, there are portable toilets scattered along the service road.

Recreation Resources

The unit serves a local and regional recreation need. The unit has historically provided an area for recreation because of its accessibility. Access to the beach area at the northerly end of the unit is predicated upon the tide. At high tide the water reaches the bottom of the bluffs precluding any use of the beach area. The remaining of the unit's beaches have ample access.

Historically and currently, the unit has been utilized for general beach activities including swimming, surfing, fishing and other recreational activities. The City of Huntington Beach has installed a bluff top park from the pier to approximately Goldenwest Street. This park has not only enhanced the streetscape along Pacific Coast Highway, but has provided for safe bicycle and pedestrian circulation away from vehicular traffic.

The unit's activity can be characterized as destination oriented. That is, it is utilized for a series of recreational purposes because of the sand, water, and its general location. Both passive and active types of recreation characterize its usage. Essentially, it can (and does) accommodate large groups of people for a variety of purposes. The unit experiences intense activity and use during the summer months, specifically on weekends. The activity level drops noticeably during the autumn and winter seasons.

The unit has ample and direct access to Pacific Coast Highway and adjacent neighborhoods. There is on-street parking along all areas within the unit. This is further facilitated by pedestrian stairways between the pier and Goldenwest Street. There are no stairways between Goldenwest Street and the northerly boundary of the unit.

There are possible hazards associated with storm surf, primarily during the autumn and winter months. Riptides and undertows present a constant concern for swimmers and surfers. As previously mentioned, there is a degree of hazard associated with access down the bluff areas between Goldenwest Street and the northerly boundary of the unit.

Resource Policy Formation

Reclassification

The unit has been part of the Bolsa Chica State Beach until October, 1986. At that time, the State Parks and Recreation Department reached an agreement with the City of Hunington Beach that provided for the assumption of the maintenance and operation of the unit. The City of Huntington Beach, through existing policies, has proposed to enhance the recreational use of the unit by providing a link between the City's and State's bicycle/pedestrian path, along with additional parking, landscape, permanent restrooms and concession facilities.

This change in responsibility and subsequent plans have necessitated the reclassification of the unit. The following definition of a state park, as stated in the California Public

Resources Code (PRC), Section 5001.5 (c), is pertinent in plan formulation for resource management and recreational development:

> "State parks...consists of...areas of outstanding scenic or natural character, oftentimes containing also significant historical, archaeological, ecological, geological or other such values. The purpose of state parks shall be to preserve outstanding natural, scenic and cultural values...
>
> Improvements undertaken within state parks shall be for the purpose of making the areas available for public enjoyment and education in a manner consistent with the preservation of natural, scenic, cultural, and ecological values for present and future generations. Improvements which do not directly enhance the public's enjoyment of the natural, scenic, cultural, or ecological values of the resource, which are attractions in themselves, or which are otherwise available to the public within reasonable distance outside the park, shall not be undertaken within state parks."

The following definition of state recreation units, as established by PRC Section 5001.5 (d), includes references pertinent to plan formation:

> "State recreation units, which consist of areas selected, developed, and operated to provide outdoor recreational opportunities. Such units shall be designed by the State Park and Recreation Commission by naming, in accordance with the provisions of this article relating to classification.
>
> In the planning of improvements to be undertaken within state recreation units, consideration shall be given to compatibility of design with the surrounding scenic and environmental characteristics.
>
> Such areas shall be selected for their having terrain capable of withstanding extensive human impact and for their proximity to large centers of population, major routes of travel, or proven recreational resources such as manmade or natural bodies of water."

No natural preserves are proposed for the unit due to the absence of threatened or endangered plant, animal or any other ecological entity.

Declaration of Purpose

The City of Huntington Beach-State Beach has been established in order to make available to the general population, outstanding natural beach areas, the ocean, and related cultural and esthetic features. It is located within Orange County with ample access

from Pacific Coast Highway along its entire length. Additionally, specific policies have been established and implemented that assures this access while maintaining scenic, culture and esthetics resources.

Although it is a relatively small area -100 acres/2.3 miles of coastline - it serves a regional population from Orange, Los Angeles and Riverside Counties.

Zone of Primary Interest

The entire unit, because of its size and uniformity, comprises a single zone of primary interest. Particular concern would be any development or changes that would inhibit or threaten to destroy the aforementioned environmental - both natural and cultural-values.

Resource Management Policies

Management of resources within this unit is regulated by policies, objectives and implementation vehicles established by the City of Huntington Beach and the State of California. These policies are stated in the following paragraphs. Included are previously established policies and directives that are especially pertinent to existing or potential resource problems. This section of the Resource Element will serve to satisfy the requirements pertaining to the development of a Resource Management Plan (PRC Section 5002.2). Additionally, other resource management policies are set forth in the environmental impact element of the unit's general plan. These policies are a synthesis of existing municipal and state policies.

There are no resources which will be eliminated or substantially altered as result of the proposed general plan. The general plan's intent is to preserve and enhance the enjoyment of the scenic and recreational resources of the unit. No natural processes will be disrupted as a result of the general plan.

Natural Resources

Topographic Resources

Topographic Hazard Mitigation: The unit's topography is defined by wave and tidal activity which has created steep bluff areas. The hazards include an eroding bluff edge and steep bluff face. This hazard is accenuated by the increasing number of people.

Policy: The bluff edge should be posted and a protective element be constructed. Seacliff retreat is recognized as a natural process that cannot be permanently stopped.

Monitoring of Topographic Hazards: These bluff areas are the result of natural processes. This should be continually monitored and appropriate action be taken to assure visitor protection.

Policy: A monitoring program should be established that will mark the progress of wave and tidal activity, beach and cliff erosion, and surface cracks along the top of bluff areas. This program should utilize field investigation, periodic reports and photographs.

Hydrologic Resources

Water Quality Control The ocean water quality is monitored by the Regional Water Quality Control Board's National Pollutant Discharge Elimination System (NPDES) permit. Additionally, an injection well system maintained by the County of Orange creates a barrier against salt water intrusion among the aquifers.

Policy: The City of Huntington Beach shall support and maintain an active role in both the RWQCB's and County's water quality programs.

Geologic Resources

Geologic Hazard Mitigation: Hazards such as landslides, seismic events and tsunamis are geologic hazards associated with this area.

Policy: Hazardous or potentially dangerous areas should be posted; and fencing and other protective structures should be provided to assure safety.

Monitoring of Geologic Hazards: The area is known for historic and existing seismic activity. Recognition of these processes and the tracing of their activity will support visitor and infrastructure protection.

Policy: A monitoring program coordinated among various federal, state, county and city agencies should be established and maintained. This program could include field investigations, periodic reports and educational programs.

Seismicity: The Newport-Inglewood Fault is the primary fault responsible for direct seismic activity.

Policy: New structures within the unit shall be designed to withstand a Richter magnitude 7.0 earthquake, with repeatable ground acceleration of 0.33 gravity (g).

Soil Resources

General Erosion Control: Soil erosion has been greatly accelerated by foot traffic and wave and tidal activity.

Policy: Erosion control features should be pursued and implemented. Such features may include, but not be limited to, improved and controlled access routes to the beach area, stratigically placed landscaping and fencing and walls. No new permanent structures shall be placed on the sand.

Littoral Sand Loss: Sand loss exposes shoreline facilities and ocean-facing cliffs to direct wave attack. Littoral sand loss is a regional problem common to the entire Orange County coastline. Monitoring of littoral sand movement and appropriate recommendations concerning where artificial sand replenishment may be beneficial.

Policy: Littoral sand loss is recognized as a major threat to existing recreational resources. The department shall work with other agencies, including the County of Orange Environmental Management Agency, Southern California Association of Governments and the U.S. Army Corps of Engineers, to develop regional solutions to the sand loss problem. Any major program of sand replenishment or retention must consider the regional nature of the problem and and the regional impact of actions taken along a segment of the shoreline.

Plant Resources

General Vegetation Management: There are no known endangered or threatened plant species within the unit. The majority of the plant life is non-native to the area.

Policy: Continue similar landscaping theme throughout unit. Emphasis should be placed on water conservation and appropriate plant material.

Animal Resources

There are no known endangered or threatened species within the unit. Very little animal life exists within the unit.

Marine Life Resources

Protection of Marine Life: Marine life population could be affected by both visitors and oil operations.

Policy: All applicable State Department of Fish and Game regulations pertaining to size, amount and type of species taken shall be posted and enforced. The NPDES permit shall continue to required weekly monitoring reports and all applicable conditions associated with said permit shall be enforced.

Cultural Resources

The unit is within a larger geographical entity that does not contain significant cultural/historical resources. There are no known archaeological or paleontological sites within the unit.

Esthetic Resources

The scenic resources of the unit are of significant importance. They include ocean vistas, Caltalina Island and the municipal pier. Scenic detractions include overhead utilities, portable toilets and wall grafitti.

Policy: The scenic resources shall be protected from obstructive structures and other elements. An implementation program for the placement of utilities underground should be pursued. The bluff walls should maintain an attractive appearance.

Recreational Resources

The unit should continue to have ample access for a wide variety of passive and active recreational uses.

Policy: The unit shall be preserved for recreational uses. Areas within the unit that are improved should be developed in a consistent theme with the existing park improvements.

Bicycle/pedestrian paths should be separated from vehicular roadways.

Adequate and safe access points should be provided from the bluff top area to the beach area. Adequate restroom facilities should located at strategic locations.

Allowable Use Intensity

Allowable use intensity is determined by analysis of three components: 1) the impact of any development and use on natural and cultural resources; 2) visitor perceptions and attitudes; and 3) management objectives.

The first and most important component in determining allowable use intensity involves an analysis of the natural, cultural, and esthitic resources to determine the area's physical limitations for development of facilities, and the ability of the ecosystem

to withstand human impact (ecological sensitivity). This analysis is based on a number of considerations, including: cultural and esthetic resources sensitivity; soils and their erodibility and compaction potential; geologic factors, such as slope stability and relief; hydrologic considerations, including the potential for pollution of surface waters, flooding, and depleting surface and groundwater through water use; vegetation characteristics, such as durability, fragility, wildfire hazard, and regeneration rates; and wildlife ocnsiderations, such as tolerance to human activity, wildlife population levels,and stability. Additional considerations in determining ecological sensitivity are: rare and/or endangered plants and animals; unique botanical features or ecosystems; and examples of ecosystems of regional or statewide significance.

The second component, visitor perceptions and attitudes, involves assessing the social objectives of the department, what degree of isolation or corwding is acceptable, and other perceptions and attitudes pertaining to the quality of visitors' recreation experiences. Although these factors are very difficult to quantify, this component's influence is extremely important.

The management objective for this unit is set fort in the statutes defining a state park (see Classification).

The entire unit can be classified as an appropriate area for high intensity use. This provided for the widest range of use extending from hiking ans scenic observation (low intensity) to parking on paved surfaces (high intensity). Table 1 depicts allowable use of sensitive areas.

It should be noted that the aforementioned recommendations and policies pertaining to bluff area northerly of Goldenwest Street would insure safe high intensity use. Until specific measures are taken, the bluffs, bluff edge and wall could be considered constraints to full enjoyment and use of this area.

TABLE 1

Limiting Factors and Allowable Use of Sensitive Areas

Sensitivity	Limiting Factors	Allowable Use
High	Very fragile or valuable cultural resources, very sensitive ecological resources, geologic hazards and land instability.	Light-intensity uses: Birdwatching Hiking Nature study Painting (artistic) Photography Scenic observation
Moderate	Slope stability, moderate eorsion potential, sensitive ecological resources, important scenic resource areas.	Medium-intensity uses: Bicycling (on designated paths) Fishing Picnicking (maximum of two sities/acre) Sunbathing Surfing
Low	Moderate to low erosion potential.	High-intensity uses: Camping Parking (paved) Picnicking (three or more sites/acre) Roads (paved)

LAND USE AND FACILITIES ELEMENT

This element provides information on current land uses around the unit, explains current conditions in the unit, and recommends improvements. For purposes of this plan, three (3) study areas have been identified which comprise the entire unit:

Area I - Municipal Pier to Seventh Street
Area II - Seventh Street to Goldenwest Street
Area III - Goldenwest Street to municipal boundary

The unit is bounded by Pacific Coast Highway and the Pacific Ocean. It is a narrow strip of land that is approximately 2.3 miles in length and encompasses approximately 100 acres.

Land Use Patterns of Surrounding Area

The unit is within the jurisdictional boundaries of the City of Huntington Beach. The area across Pacific Coast Highway (PCH) near the southerly part of the unit is a redevelopment area designated for (and occupied by) commercial use. The land between Seventh Street and Goldenwest Street on the easterly side of PCH is occupied by a variety of highway commercial uses and multiple family dwelling units. The area on the easterly side of PCH, north of Goldenwest Street is occupied by an oil field. Access to the unit is provided along PCH. A primary facility adjacent to the unit is the Huntington Beach municipal pier. The pier provides a node for commercial, recreational and scenic opportunities.

Ownership

The entire unit is owned by the State of California with various lease agreements with industrial (oil) and residential (condominiums) interests.

Existing Unit Conditions

Area I

This area is between the municipal pier and the condominiums (approximately Seventh Street). Currently this area consist of a parking lot (328 spaces), a concession stand (with restrooms), a bicycle/pedestrian asphalt path and the general beach area. The parking area takes access from Pacific Coast Highway (PCH) at the intersection of PCH and Fifth Street.

Area II

The area continues from the previously mentioned parking area northward to Goldenwest Street. It consists of a condominiums; complex (106 units); a bluff top park with an asphalt bicycle/ pedestrian trail, a service road, a series of oil pumps (18) and the general beach area. There are six (6) primary access points from PCH to the beach. There are temporary (chemical) restroom facilities adjacent to the base of these points of access.

Area III

This area extends from Goldenwest Street to the northerly municipal boundary. It is essentially unimproved consisting of an asphalt bicycle/pedestrian path adjacent to PCH. There is a service road which links a series of oil pumps (11). This area is characterized by steep bluffs and a small amount of actual beach area.

The entire unit is utilized for both passive and active recreation. The unit is part of a larger beach system that serves a regional population of approximately 1 to 2 million people. In 1980, approximately 1.9 million people visited Bolsa Chica State Beach (of which the unit is currently a portion). Although, the State Department of Parks and Recreation do not have exact figures, it is estimated that over 2.2 million people visited Bolsa Chica State Beach in 1985. The unit size and configuration precludes any significant amount of development (Figure 3).

The following needs characterize the different area:

Area I - Additional off-street parking is needed to replace the on-street parking on PCH which is scheduled to be removed.

Area II - Additional off-street parking is needed to replace the on-street parking on PCH which is scheduled to be removed.

Area III - Off-street parking is needed to replace the on-street parking on PCH which is scheduled to be removed.

- The bicycle/pedestrian path needs to be relocated away from PCH and improved with low maintenance landscaping.

- A buffer area needs to be established between the bluff edge and the proposed bicycle/ pedestrian path alignment.

- A protection railing needs to be located along the bluff edge.



AREA III

Bicycle/Pedestrian Path

Oil Pumps

AREA II

Condominiums (106 units)
Bluff Top Park
Six Access Points
Restroom (temporary)
Oil Pumps
Bicycle/Pedestrian Path
Service Road

AREA I

Municipal Pier
Parking Lot
(320) spaces
Concession Stan
Bicycle/Pedestri
Path
Restrooms
(permanent)

FIGURE 3

EXISTING FACILITIES

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- There are no clearly identified points of access from the bluff top to the beach.

- Bluff erosion is a continuing problem.

Beach sand depletion is a continuing problem along the entire unit's length. Currently, there is a beach replenishment program occuring that involves dredging material from northerly harbors and depositing of the material in the ocean. This program occurs periodically and is a joint effort among the following agencies:

U.S. Army Corps of Engineers
U.S. Department of Boating and Waterways
Surfside Colony
City of Newport Beach
City of Huntington Beach
County of Orange (EMA)
State Department of Parks and Recreation

In 1983, approximately 1.5 million cubic yards of sand was removed from the Anaheim Bay area and deposited into the Pacific Ocean. Prior to this cumulative approximate total of 7.8 million cubic yards has been transported from the bay to the ocean over a period of fifteen years. However, this is not a long-term solution to the regional problem addressed in the resource inventory pertaining to this unit.

Facility Recommendations

The following list recommended actions for the development of the unit is organized by area. These actions comprise the general plan (development plan) for the State Beach.

Area I

- Construct a tri-level parking structure on the existing parking lot site. (This structure will not extend above the elevation of PCH or beyond the existing bicycle path.)

- Provide for passive (surf museum) and active (volleyball, basketball, etc.) recreation both within and on top of the parking structure, respectively.

- Provide for a commercial (food) pad on top of parking structure.

- Remove existing concession stand from beach area and relocate as part of parking structure.

- Install permanent restrooms with parking structure.

Area II

- Install permanent restrooms at points of access.
- Install parking spaces along service road.
- Provide for vehicular access to service road (and proposed parking stalls) from PCH at Goldenwest Street and 11th Street.
- Provide for concessions.

Area III

- Realign and improve (landscaping) bicyle/pedestrian path.
- Provide off-street parking.
- Provide landscape/fence buffer between proposed parking lots and PCH.
- Provide a buffer area between bluff edge and bicyle/pedestrian path.
- Install protective railing in the proposed buffer area.
- Install access facilities (stairs or roadway) at strategic locations (Figure 4).

Unresolved Planning/Environmental Issues

There is a potential conflict among bicyle/pedestrian and vehicular traffic at Goldenwest Street. This will need to be addressed in detail during the design and working drawings phase.

The bluff in Area III is eroding at variable annual rates due to seasonal storms. It is necessary to monitor this erosion in order to prevent damage to future improvements.



AREA III

Realigned Bicycle/Pedestrian Path
Off-Street Parking
Landscape Buffer
Protective Railing
Access Facilities

AREA II

Permanent Restrooms
Parking Stalls
Vehicular Access

AREA I

Parking Structure
Passive/Active
Recreational
Facilities
Commercial Pad

FIGURE 4

RECOMMENDED FACILITIES

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INTERPRETIVE ELEMENT

This general plan element outlines what interpretation would be appropriate at the City of Huntington Beach - State Beach.

Methods/Media

The unit is located among some of the finest surfing beaches in the nation. There are several interpretive elements south of the unit that account for surfing's role in the City's history. The south side of the pier is the location for an annual surfing contest that is televised and reported on by various means of media.

Interpretive Themes

Safety, recreation, and cultural identity should characterize interpretive themes.

Recreational Use of the Surf

Safe use of the surf should be interpreted to visitors. Subjects should include wave and ocean bottom formation and safe techniques to surf (body and board).

Staying Safe at the Beach

Visitors should be informed about water hazards and the prevention of beach related accidents. Subjects should include rip-tides, sharp drop-offs, and undertows.

Cultural Significance of Surfing

There is a significant amount of interest of creating a surf museum within the unit. The museum would include a chronological depiction of the sport as well as its current impacts on music, fashion and recreation.

Visitor Facilities

There are currently no interpretive facilities within the unit with the exception of signs warning of dangerous bluffs. The logical siting of the aforementioned surf museum would be within the proposed parking structure because of its proximity to the pier and downtown Huntington Beach.

Recommendations

- Install interpretative panels addressing safety and caution on permanent structures adjacent to primary pedestrian routes.

- Provide an area near the Municipal pier (e.g., within the proposed parking structure) for a surf museum.

OPERATIONS ELEMENT

Introduction

In 1986, the State Department of Parks and Recreation delegated the responsibility for the operation of the unit to the City of Huntington Beach. The agreement submitted by the State Department of Parks and Recreation is for twenty years and with a twenty year option. The City would pay for the development, maintenance and operation of the unit and, in turn, receive all generated revenue. Any development, construction or improvements to the unit would be subject to prior written approval by the State. The components that comprise the operation and maintenance of the unit includes lifeguards, City police patrols, landscaping, refuse collection concession and parking lots. Staffing and associated costs are scheduled to be absorbed by the City of Huntington Beach.

Current Operational Concerns

The primary operational concern is to implement the aforementioned resource management policies by the realization of the general plan. The unit is in need of a direct, local maintenance.

Potential Operational Concerns

The principal potential operational concern is the accommodation of the increasingly number of visitors. The general plan has considered future use of the unit and the City has adjusted its policies and operational budgets accordingly.

CONCESSION ELEMENT

Introduction

The City of Huntington Beach recognizes the need to provide support concession facilities in order to serve the recreation population. It is the City's policy to contract concession opportunities which will enhance the visitor's use, enjoyment and convenience.

Existing Concession Activities

Currently, the only concession activity is a small structure which serves fast food and accommodates restroom facilities. This structure is located on a pad in the beach area northerly adjacent to the pier.

Potential Concession Activities

The proposed general plan will relocate the existing concession building to the parking structure. In doing so, this area will be restored to sand and the parking structure will be designed to accommodate the concession building and restrooms.

Additionally, the City is currently pursuing an agreement that will locate another concession facility near Goldenwest Street. It is not known at this time whether this proposed facility will be permanent, temporary or mobile.

Recommendations

1. The existing concession building should be relocated within the proposed parking structure.

2. An additional concession facility should be sited near Goldenwest Street.

ENVIRONMENTAL IMPACT ELEMENT

Introduction

Pursuant to Public Resources Code Section 5002.2, this Environmental Impact Element constitutes a report on the project for the purposes of satisfying the California Environmental Quality Act (California Administrative Code Section 21000 et seq).

The general plan is broad in scope and conceptual in design. Therefore, the environmental analysis reflects the plan at this stage. Should more detailed plans evolve, subsequential CEQA review would occur at that time, if warranted.

This Draft Environmental Impact Element has been prepared in accordance with CEQA and the CEQA Guidelines, as amended. It is an objective assessment of the proposed project's environmental consequences. Aspects of the proposed project which may constitute a change (adversely) in the environment have been noted. All other issues have been briefly addressed. Additionally, pursuant to CEQA Guidelines, several existing documents have been incorporated by reference into this general plan document. These documents include, but are not limited to, the following:

Downtown Specific Plan
Downtown Specific Plan EIR
Local Coastal Element
Recreation Element
Environmental Impact Statement for the Pacific Coast Highway Widening Project
Open Space and Conservation Element

Additionally, this element incorporates by reference the resource inventory, resource summary, resource element and management policies that have been prepared for this unit and accompanying general plan.

Development of the general plan for this unit has consistently forcused upon avoiding any adverse environmental impact. The resource inventory, summary and element have provided the parameters which have influence the conceptual design of the general plan. Therefore, mitigation measures have been implemented to the point that the project will not have an adverse impact on the environment.

Summary

The following environmental impacts may occur as a result of the proposed general plan.

- Increased number of vehicles between PCH and the beach.

- Increased traffic along existing and proposed service roads within the unit.

- Increased runoff from proposed parking areas.

- Increased light and glare from proposed parking areas.

- Increased water consumption.

- Potential conflict among vehicular and non vehicular traffic.

Mitigation Measures Proposed

Increased number of vehicles:

- The proposed parking areas will be designed in order to facilitate ingress and egress from and to PCH.

- The amount of vehicles will be closely monitored in order to designate "parking lot full" at the earliest possible time.

- Increased traffic along existing and proposed services roads.

- Vehicular and non vehicular traffic will be separated.

- Strict enforcement of safe speed limits.

- Signs, speed bumps and other appropriate means of warning will be located at critical intersections.

- All major intersections involving PCH and points of ingress/egress of the parking areas will be signalized pursuant to Caltrans and City of Huntington Beach specifications.

Increased runoff:

- Increased runoff will be directed into existing storm drains. Where no storm drains are immediately adjacent to the site, parking areas will be graded to drain towards the street and subsequentially into the existing storm drain system.

Increased light and glare:

- Parking areas will have a landscape and/or fence buffer. Proposed lighting will be low intensity and have a limitation of hours of operation.

Increased water consumption:

- Drought-tolerant landscaping will be utilized.
- Water-conservation facilities including, but not limited to, the following will be used:
  - ° low flush toilets
  - ° low flow showers
  - ° drinking fountains with self closing valves

Potential conflict among vehicular and non-vehicular traffic:

- Signs, speed bumps and other appropriate warning devices shall be located at critical intersections

Project Description

Please refer to Land Use and Facilities Element.

Environmental Setting

The unit is located within the City of Huntington Beach of the County of Orange. To the north is the Bolsa Chica State Beach and Bolsa Chica Wetlands which are solely under the County jurisdiction: To the east and south is the City of Huntington Beach which is occupied by oil fields, and a mixture of residential and commercial uses. The Pacific Ocean is to the west and south.

For a description of the environmental setting of the unit, please refer to the Resource Inventory, Resource Element and the Land Use and Facilities Element of the General Plan. The following paragraphs are included to complete the description of the environmental setting.

Air Quality

The unit is located within the South Coast Air Basin. This basin consists of the metropolitan areas of Los Angeles, Orange, San Bernardino, and Riverside Counties. On most days the net wind flow is from west to east, which produces the effect of having source areas near the coast impacting receptor areas inland to the east.

The South Coast Air Basin comes under the jurisdiction of the South Coast Air Quality Management District. The closest air quality monitoring station is in the City of Costa Mesa. The major pollution sources in the region are automobile and truck exhaust and local industrial plants. The pollutants of primary

concern are ozone, nitrogen dioxide, carbon monoxide and sulfur dioxide. High ozone days require sunshine, early morning stagnation, high surface temperatures, and strong, low, morning inversions which greatly restrict vertical mixing. High nitrogen dioxide days occur during autumn and winter, and during summer weather conditions of low inversions, limited mixing and stagnant windlfow. Highest concentration occur near high-density traffic sources. High carbon monoxide days are a result of strong winter surface inversions and light winds. Highest concentrations are found near the coast and valleys immediately inland. Again, concentrations are associated with peak traffic hours. High sulfur dioxide concentrations occur immediately downwind of sources.

Ozone is usually transported by winds from source areas along the coast to receptors along the base of the surrounding mountains. Offshore winds cause a more limited ozone transport with highest concentrations occurring in the western Los Angeles County area. Early morning northerly winds can cause ozone pollutants to be pushed into Orange County through Santa Ana Canyon, also of concern to the Huntington Beach area are east and northeasterly winds which blow pollutants out of the central basin areas into the adjacent ocean area.

Data from Costa Mesa suggest that standards for ozone are exceeded on occasion in the summer, and those for carbon monoxide (CO) and nitrogen dioxide (NO_2) in winter. For example, five violations of the federal ozone standard of 0.12 ppm occurred in Costa Mesa during a period when 146 violations occurred at Fontana and 132 occurred at Riverside. Six violations of the eight hour CO standard in Costa Mesa can be compared to 70 in Lennox and 63 in Burbank. Similarly, two violations of the NO_2 standard in Costa Mesa compare to 23 in Burbank and 17 in Anaheim.* Thus, while there may be a few instances of potentially unhealthful air quality in the Huntington Beach area, both the frequency of violations and their magnitude are much less than in many other portions of Southern California.

The unit serves to accommodate traffic and visitors. It is not a consistent generation source which can be measured and quantified. The general plan does not constitute a significant impact on the air quality environment.

Mitigation: Fugitive dust during construction shall be controlled by a water truck which is to remain on-site until project is completed.

Noise

The primary source of noise is the traffic on Pacific Coast Highway - outside of the unit. The recently completed Pacific Coast Highway EIS (SCH 80121150) designates the unit to be in Activity Corridor C. This activity corridor has a maximum noise level of 72 dBA. The unit actually recorded maximum sound measurements of 65 dBA (1981).

The unit will not be a major generator of noise street, however, will be subjected to noise emanating from Pacific Coast Highway. Parking areas located adjacent to Pacific Coast Highway will act as sound buffers. Additional landscaping/fencing buffers should be included within the design of these parking areas.

Mitigation: A landscaping/fence buffer shall be constructed between Pacific Coast Highway and the proposed parking area within Area III of the unit.

Traffic/Circulation

Primary access to the unit is provided by Pacific Coast Highway. On-street parking is provided along the entire length of the unit. The only existing off-street parking is the parking lot (330 spaces) that is northerly adjacent to the pier. Currently, Pacific Coast Highway has a peak month (spring-summer) average daily trip (ADT) count of 40,800 vehicles. The non-peak month count is 35,000 ADT.

The major intersections are operating at a level of service (LOS)F. Caltrans proposes to widen Pacific Coast Highway in order to accommodate the increasing traffic and increase the LOS to C. The widening will consist of eliminating the on-street parking in order to accommodate the additional lanes.

Although, the unit is difficult to quantify for traffic generation purposes, it will be impacted by adjacent and destination traffic. Off-street parking will be provided by the proposed parking structure (approximately 500 cars), parking stalls along the existing service road in Area II (approximately 173 cars) and near the intersection of Goldenwest Street and Pacific Coast Highway (approximately 200 to 300 cars). There has been a conscientious effort to replace the existing on-street parking with off-street facilities within unit at an one-to-one ratio.

A license plate survey was conducted in 1986 and revealed that 11.7 percent of the beach traffic originated from Huntington Beach. Thirty-four percent originated from Orange County and the remainder of the vehicles (54.3%) originated from outside of Orange County.

Transit

The Orange County Transit District (OCTD) serves the unit's general area with hourly bus routes. The frequency of this service increases during the summer as the need dictates. Currently, OCTD has Bus Routes Nos. 1, 25 and 29 serving the area. Tentatively, there are "pull-out" areas designed for existing bus stop routes along Pacific Coast Highway.

The OCTD provides an imperative service for visitors from the Orange County area. These routes are among the most heavily utilized throughout the entire system.

Bicycles

The City of Huntington Beach, in cooperation with the State of California has established a bluff top park that includes an asphalt bicycle/pedestrian path. This path is part of a much larger system that extends both north and south of the unit as well as throughout the unit. The path is also used by pedestrians.

There is an asphalt path northerly of Goldenwest Street. However, it is unimproved and adjacent to Pacific Coast Highway. The general plan proposes to realign this portion towards the ocean and improve it with landscaping and periodic rest areas.

This path serves not only a recreation need, but a transit need as well. Areas of potential conflict among bicyles, pedestrians and vehicles should include design elements to assure to highest degree of safety.

Mitigation:

- Displaced adjacent on-street parking should be replaced within the unit near a one-to-one ratio.
- Potential points of conflicts among bicycle, pedestrian and vehicular traffic should be designed with signs, speed bumps and other appropriate safety devices.

Public Services

Water

Water service for the unit is provided by the City of Huntington Beach Public Works Department. There is sufficient water available for the projected needs. The only known deficiency is the lack of a water in Pacific Coast Highway adjacent to Area III of the unit. There is, however, a 12-inch water main located in Goldenwest Street.

Sewer

The project is located within the service area of the County Sanitation District No. 11 or Orange County. Projected and recently completed trunk sewer lines provide adequate capacity. However, a concern is that some of the restroom locations are located below the trunk lines elevation. In this case a decision regarding the type of wastewater system (e.g. vaults, chemical toilets, or pumps) will need to take place.

Solid Waste

Currently, the Rainbow - Disposal Company provides solid waste collection for the unit and the City of Huntington Beach. Although, the increase in solid waste will not be significant as a result of the general plan, the Rainbow Disposal Company has indicated that there are no anticipated problems in maintaining an adequate level of service.

Electrical Utilities

Electrical service is provided by Southern California Edison Company. The need for service will be extremely low and well within the Edison Company's capacities.

Mitigation: All appropriate conservation methods herein described should be implemented with the general plan.

Fire

Fire protection and paramedic service is provided by the City of Huntington Beach Fire Department. The nearest fire station is the Lake Street Fire Station which is located at Lake and Frankfort Streets. Response for the majority of the unit is within the five minute range. The primary concern is the proposed parking structure. It is recommended that a sprinkler system be installed at the time of construction.

Mitigation: The proposed parking structure adjacent to the pier should be designed with an approved sprinkler system.

Plans and Zoning

The majority of the unit is located within the City of Huntington Beach Downtown Specific Plan. Area I of the unit is within District 10 - Pier Related Commercial. The intent of District 10 is to provide for commercial uses on and adjacent to the municipal pier which will enhance and expand the public's use and enjoyment of the area. The proposed general plan is consistent with the regulations established by District 10.

District 11 of the Downtown Specific Plan is called Beach/Open Space. The primary intent of District 11 is to preserve and protect the sandy beach area while allowing for parking and ancillary beach related commercial and convenience uses. This area extends from approximately Seventh Street to Goldenwest Street and corresponds with Area II of the general plan. The proposed elements that comprise Area II are consistent with the regulations established by District 11.

Area III of the general plan - Goldenwest Street to the northerly municipal boundary - is within the SL-O-C (Shoreline-Oil-Coastal) Zone. The primary intent of this zone is to provide for coastal recreation uses while recognizing the existing oil production facilities. Area III proposed element are consistent with this intent.

The entire general plan is further governed by the Local Coastal Element of the City of Huntington Beach General Plan. The unit's general plan is consistent with the goals and policies established within the local Coastal Element.

Mitigation: No mitigation measures needed.

Significant Environmental Effects Which Cannot Be Avoided If Proposal Is Implemented

None of the aforementioned environmental effects are classified as significant even if the general plan is realized to its fullest extent.

Alternatives

No Project

If the proposed general plan is not pursued, the aforementioned impacts would occur. The impacts described herein are going to occur as a result of external forces and trends regardless of the proposed general plan. Indeed, elements that comprise the

general plan will absorb and mitigate, in part, some of these impacts. However, should the general plan not come to fruitition, existing parking problems, cliff erosion, and soil breakdown will occur at an increasing rate.

Commercialization

The unit could be advantageously utilized for a higher commercial intensity. However, its size and configuration severly limits this alternative. Additionally, there would be severe policy and environmental consequences if this alternative was pursued.

Oil Production

The unit is within an area of historic oil production. There are several oil pumps in operation within the unit. However, the oil companies have preliminarily indicated the apparent infeasibility to continue operating at some of these sites. The local oil field is generally decreasing in production and no new wells are scheduled.

Short-Term Use Vs. Long-Term Productivity

The general plan is essentially an extension of the existing uses. That is, the realization of the proposed general plan will accommodate the apparent and documented recreational cultural and physical needs. The net effect of the general plan will be an improvement of both the natural and cultural environments of the unit.

Irreversible/Irretrievable Changes/Commitments

The loss of some soils for parking areas is irreversible. The consumption of water for restroom and shower facilities may be termed an irretrievable commitment. Additionally, the consumption of fossil fuels utilized during construction is an irreversible commitment.

Growth Inducing Impacts

As previously mentioned, the unit is a secondary recepient of growth and impact. Elements which comprise the genral plan serves to accommodate this growth and the accompanying impacts. Therefore, there are no quantifiable growth inducing impacts.

Cumulative Impacts

There are no cumulative impacts other than the collective commitment of the aforementioned utilities.

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RESOURCE ELEMENT FOR THE STATE BEACH GENERAL PLAN

SUBMITTED TO THE

CITY OF HUNTINGTON BEACH

AUGUST 1987

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INTRODUCTION

PURPOSE

The purpose of this Resource Element is to establish goals, objectives and policies in order to preserve, enhance and encourage the recreational use of the unit. It includes the Resource Summary of the unit and provides direction for the Resource Management Policies and the General Plan of the unit.

Project Description

The project is known as the State Beach - City of Huntington Beach. It was formerly a portion of the Bolsa Chica State Beach. The unit is located between the Huntington Beach Municipal Pier and the City of Huntington Beach northerly municipal boundaries. It is between Pacific Coast Highway and the Pacific Ocean. It is approximately 2.3 miles in length and encompasses approximately 100 acres.

The unit is within the County of Orange and lies between the Bolsa Chica State Beach and the City of Huntington Beach Municipal Beach. Nearby communities include Fountain Valley, Newport Beach, Westminster and Seal Beach. The most prominent geographical entity is the Pacific Ocean that is southerly and easterly adjacent to the unit.

Another prominent landmark is the Bolsa Chica Wetlands that are located to the northeast of the subject unit. The wetlands have been the subject of thorough analyses, development alternatives and state legislation. The unit is located within the Coastal Strip landscape province, and specifically in a zone designated as an area between the Mexico border and Point Conception. The unit has direct access to and from Pacific Coast Highway along its entire length. Pacific Coast Highway has on-street parking along the oceanward side. Additional parking lots are located near the municipal pier between the beach and Pacific Coast Highway. There are a series of major arterials that terminate into Pacific Coast Highway which directly facilitate traffic from population areas to the unit. These arterials include Warner Avenue, Goldenwest Street and Beach Boulevard. The nearest freeway is the San Diego Freeway (S.R. 405) which is approximately five (5) miles from the unit.

The unit is adjacent to the large population centers of Orange County and is approximately 30 to 40 minutes of driving time away from the Los Angeles area. Pacific Coast Highway is served by the Orange County Transit District (OCTD) and has several bus stops adjacent to the unit. Primarily, the unit is served by OCTD Routes No. 25 and 29. The nearest airport is the John Wayne

Airport which is located approximately 10 miles to the southwest. The Long Beach Airport is located approximately 30 miles to the northeast. The Los Angeles International Airport is located approximately 40 miles to the north.

The City of Huntington Beach has assumed responsibility of this area from the State of California which has resulted in the reclassification of the unit. In assuming this responsibility, the City plans to continue its recreational improvements from Goldenwest Street to the northerly municipal boundary.

As previously mentioned, the unit is relatively small (100 acres) and has a long, narrow configuration. It is primarily composed of a beach area and a bluff area. At the southerly end of the unit, the beach area occupies the majority of the unit. As the unit extends northward, the beach area diminishes and the bluff area increases in width. The unit is occupied by a pier side parking area, a multiple family development, a concession stand, a series of oil pumps and a bluff top park between the municipal pier and Goldenwest Street. From Goldenwest Street to the northerly municipal boundary, the unit is void of improvements with the exception of some oil pumps and an asphalt bicycle/ pedestrian path.

RESOURCE SUMMARY

Natural Resources

Topography

The site of the 100-acre unit is near the southwestern onshore termination of the Newport-Inglewood structural zone. The unit's area extends from Pacific Coast Highway oceanward to the Ordinary High Water Mark. The local features affecting the topography of the park area are the Santa Ana Gap, Huntington Beach Mesa, the Bolsa Gap, and the shoreface itself. Elevations range between sea level and a maximum of 12 meters (40 feet) above sea level. The steepest elevations are encountered in the bluff area at the northwest end of the unit. Slopes range from 0 percent to nearly vertical.

Meteorology

The unit experiences a Mediterranean semi arid steppe climate. Additionally, the unit's area is strongly influenced by the moderating effects of the ocean. The temperature regime is moderate. The average summer temperature is 21°C (67°F). The average winter temperature is 17°C (55°F).

Precipitation averages 28.7 cm (11.4 inches) per year. The rainy season extends from November to April, when greater than 90 percent of the annual rainfall occurs.

The presence of the marine layer results in moist air near the land surface along the coast. Over the ocean, the cool moist air results in a fog layer which recedes seaward during late morning and afternoon, and moves onshore during late afternoon and evening. The fog encroaches onto the land more frequently in spring and summer months due to greater temperature variations between the ocean and land.

Hydrology

The primary watershed affecting the unit is the Santa Ana River which currently discharges into the Pacific Ocean south of the unit. The Santa Ana River has water primarily between November and April.

The unit lies within the northeastern portion of the Orange County groundwater basin, where groundwater is contained in a series of pressured aquifers. These aquifers include the following:

- a semi perched zone;
- The Bolsa Aquifer;
- The Talbert Aquifer;
- The Upper Pleistocene Semi-Perched Zone;

- The Alpha Aquifer;
- The Beta Aquifer;
- The Lambda Aquifer;
- The Meadowlark Aquifer;
- The Main Aquifer;
- The Lower Zone; and
- The Upper Pliocene Deposits.

The primary source of water for the unit is derived from the Main Aquifer. This Aquifer ranges from 150 to 250 feet in thickness and its base reaches a maximum elevation of 350 feet below mean sea level.

Geology

The subject unit lies near the northwestern flank of the Peninsular Ranges geomorphic province of southern California. The Peninsular Ranges province includes the Los Angeles structural basin, the offshore area known as the Continental Borderland, the Santa Ana Mountains and the rest of the Peninsular Ranges to the south, and extends from near latitude 34° North in the Los Angeles basin to the tip of the Baja California peninsula. Characterized by elongated northwest-trending mountain ridges separated by straight-sided sediment-floored valleys, the province has been uplifted, tilted seaward and sliced longitudinally into subparallel blocks by young, steeply dipping faults. These northwest to west-northwest trending fault zones separate large elongated blocks of different structural elevation which are terminated at their northwestern margin by the east-west trending structures of the Transverse Ranges province. The major faults appear to be late Cenozoic in age, and many are seismically active. The Newport-Inglewood structural zone is one of the major northwest trending structural elements of the northern portion of the Peninsular Ranges province. The onshore extent of the zone runs from the mouth of the Santa Ana River, just south of the subject unit, northwest to Beverly Hills.

The unit lies within the regional structural trough known as the Los Angeles basin. Non-marine to bathyal marine upper Cretaceous, Tertiary and Quaternary sediments deposited on crystalline rocks of both oceanic and continental basement compose the stratigraphic sequence of the basin. Strata consist primarily of conglomerates, sandstones, sands, shales, and mudstones. Sediments were derived from the north and east except during middle Miocene time when oceanic highlands are thought to have shed clastics from the south. The basin, which is bounded on the north by the San Gabriel and San Bernardino Mountains, on the south by the Pacific Ocean, and on the west and the east by the Santa Ana Mountains and San Joaquin Hills, is approximately 45 miles wide by 65 miles long. Geophysical studies show the total depth of the basin to be over 30,000 feet.

The oldest geologic formation is known as the Catalina Schist which ia a foliated metamorphic crystalline rock found at depths of up to 15,000 feet. The Miocene Topanga Formation overlies the Catalina Schist. It consists of an alternating sequence of gray, medium-to coarse grain sandstone interbedded with gray siltstone and sandy siltstone. The next series is the Puente Formation which consists of sands, silts and clays of late Miocene Age. The Fernando Formation (informally known as the Repetto and Pico formations) overlies the Puente Formation. It is Pliocene age strata that consists of greenish-gray micaceous siltstone, sandy siltstone, fine grained sandstone and varying amounts of interedded gray medium- to coarse-grained sandstone. The San Pedro Formation is composed of shallow marine deposits. It is composed of silt, clay sand and gravel and is exposed in limited outcrops at the margins of the mesa area that is southeast of the unit. The Lakewood Formation consists of shallow marine, intertidal and continental deposits. It is exposed at the surface on the Huntington Beach Mesa which is easterly of the unit. Recent deposits within the unit include alluvial gravels, sands, silts, marsh deposits, and beach sands. Recent beach deposits form narrow strips fringing wave-cut sea cliffs of the relatively soft Pleistocene sediments of the coastal mesa.

There are several fault zones which could (and do) affect the unit. The primary fault is the Newport-Inglewood Fault Zone. The zone is characterized by lateral strike slip movement which dips steeply to the southwest beneath the ocean.

The unit is within a geological active area due to faulting and folding, continental tectonics, and wave and tidal erosion.

Soils

There are essentially three soil types found within the unit. They are all classified within the Myford Association. The soil types, as classified by the U. S. Department of Agriculture Soil Conservation Service and Forest Service, are Beaches, Marina Loamy Sand - 0 to 2 percent slope, and Marina Loamy Sand - 2 to 9 percent slope. The erosion hazard ranges from slight to moderate assuming bare soil. Erosion occurs as a result of wave and tidal activity, pedestrian traffic and periodic precipitation. The unit lies within the San Pedro littoral cell. Sediments are transported southeasterly and eventually offshore through the Newport Submarine Canyon.

Plant Life

Approximately 25 species of plants representing 9 families have been identified within the unit. Twelve of these species are non-native to the area. The existing community is a mix of introduced species and remnant species of the native coastal strand community. It appears that most of the existing vegetation was planted for slope stabilization purposes and for esthetic effect.

No rare or endangered plants have been found in the unit.

Animal Life

The amount of animal life within the unit is severly limited due to its configuration, size and intensive recreational use. The primary mammal within the unit is the California ground squirrel (Spermophilus beecheyi). The side-blotched lizard (Uta stansiburiana) is the only noticeable reptile observed within the unit.

There are a variety of shorebirds and gulls that migrate through the area. However, the unit does not contain nesting or prominent feeding areas. There are two endangered species, as listed by the U. S. Fish and Wildflife Service, which migrate through the unit. They are the California Least Tern (Sterna atillarum browni) and the California brown pelican (Pelecanus occidentalis californicus).

Marine Life

The unit's nearshore marine habitat is not distinguished by lagoons, kelp beds, bays, or river months. It is exposed and directly affected by open surf. The fish community includes surf oriented species ranging from Jacksmelt (Atherminoosis californiensis) to California Halibut (Paralicthys californicus). The invetebrate population is a seasonal community that range Purple striped jellyfish (Pelagia noctiluca) to the Pismo clam (Tivela stultorum).

Phytoplankton occurs near the surface zone in neritic biotic communities. It is well documented that phytoplankton is a basic unit in earth's life support system. Phytoplankton provides for most of the atmospheric oxygen and serves as a basis of most marine food webs.

Ecology

The unit is within the coastal strip ecological region as designated by the Public Resources Code. Site conditions of close proximity to the ocean, moderate climate and intensive human use are all influential on the local ecosystem.

Due to the extensive disturbance and surrounding urbanization, the ecosystem of the unit has been greatly simplified. The existing vegetation provides food and nest material for the resident population of ground dwelling mammals. Reptiles and birds feed on insects which are attracted to the local plant species. Gulls, shorebirds and common birds of urban areas feed on refuse left on the beach by human visitors and or local vegetation. Additionally, the unit's size does not allow it to be classified as an ecological entity. It does not contain a wetland or marine system. The Pacific Ocean is westerly and

southerly adjacent to the unit. There are no unique features (e.g., bays, coves, lagoons, reefs, etc.) which would provide an area of study or interest.

Cultural Resources

Archaeological Sites

There are no known archaeological sites within the unit. This is probably due, in part, to natural erosion activity and intensive industrial and recreational use.

Standing Structures

The primary structure adjacent to the unit is the municipal pier. Although, the pier is technically outside of the unit's boundaries, it has a significant visual and functional effect on the unit. Originally constructed in 1904, it was reconstructed in 1914 and currently exists as 1800 foot structure.

Ethnographic and Historical Background

Southern California cultural traditions prior to 5000 B.C.E. are not well defined for Orange County and the specific unit.

By about 5,000 B.C., it appears that a relatively uniform cultural tradition existed on the coast from Santa Barbara south to San Diego. Most archaeologists call this subsistence pattern the Millingstone Horizon. This era centered around the collection of small, wild seeds and shellfish. The additive Campbell Tradition developed out of the Millingstone Horizon by about 3,000 B.C. in Santa Barbara, a little later in the Ventura area, and still later in parts of Los Angeles and Orange Counties. The Millingstone Tradition seems to have continued until 500-700 A.D. along the Orange and San Diego County coasts, when it was replaced by a cultural tradition identified by archaeologists as the last prehistoric time period.

The Millingstone Horizon is identified in part by large projectile points, the use of milling stones (mano/metate), and largely undifferentiated chip stone tool assemblage. The late prehistoric tradition has two tool phases. The early phase is marked by the introduction of small, triangular projectile points (desert side-notched points), addition of the mortar and pestle to the milling assemblage, shell beads, shellfish fish hooks, varied bone tools, so-called donut stones (use of which is not positively known), and a much broader array of ornamentation than the earlier Millingstone Horizon. The principal "late" prehistoric artifact addition is the manufacture and use of pottery. Both of these late traditions continue up to Hispanic contact in the latter part of the 17th and early part of the 18th centuries.

The primary people were of the Shoshonean linguistic group. The Gabrielinos were part of the Shoshonean group which inhabited the area.

Much of the information regarding the settlements and traditions of the Gabrielinos was recorded by Father Geronimo Boscana of the San Gabriel Mission. Although Cabrillo and Vizcaino noted smoke from numerous fires, they never landed their ships along the southern California coastline in this area. Instead, they sought refuge at Santa Catalina Island and the Channel Islands. Gaspar de Portola led his expedition through the general region in 1769, which introducted the first serious and long-term settlement of Euroamericans characterized by the missions.

It is estimated that approximately 5,000 Gabrielinos lived within the aforementioned territory at the time Portola arrived. The prominent village of the Gabrielinos was termed Puvunga which was located approximately 8 to 10 miles northwesterly of the unit. This site is now located within what is known as the Bixby Ranch in Long Beach.

The Gabrielinos had a fairly complex society with a diversified economy. Subsitence was characterized by exploitation of maritime resources including deep sea fish species and mammals. Additionally, Gabrielinos acted as significant traders between the groups which occupied the islands and inland regions. The Gabrielinos had an extensive religious and social fabric that essentially focused on a single diety--Chungichnish. Rites included dancing, fasting, animal sacrifice and week long observances. Father Boscana recorded the common practice of cremation which may explain, in part, the lack of a traditional necropolis--areas that normally yield detailed archaeological finds.

The Gabrielinos were passive in nature and accepted the European (missions) infiltration. The primary focus was the Mission San Gabriel located approximately 30 miles north of the unit. Johnston records that the Gabrielinos were devasted by European diseases due the lack of immunity.

Although, the Gabrielinos did not completely vanish, their numbers were severly reduced. The remaining Gabrielinos settled near Mission San Gabriel and became a functional part of the Mission's economy.

The historic use of the unit began with the land grant of Rancho Las Bolsas to Manuel Perez Nieto in 1784 by the Spanish Governor Pedro Fages. This grant covered 21 square miles and was used for cattle grazing.

Nieto died in 1804 and thirty years later, his grant was divided among heirs. In 1834, Mexican Governor Jose Figueroa granted the general area to Catarina Ruiz. In 1841, an area consisting of six square miles was termed Bolsa Chica and granted to Joaquin Ruiz.

Don Abel Stearns who had resided in Los Angeles since 1833 obtained ownership of Bolsa Chica and Las Bolsas in the mid 1850's. This acquisition allowed Stearns to become, the largest owner of land and cattle in southern California. Stearns died in 1877 and Stearns' successor, the Stearns Rancho Trust began to sell portions of the property.

The unit was part of an area called "Shell Beach" due to the large amount of bean clams. This beach included an area that rose sharply into bluffs that were subject to wave and tidal erosion. This area is essentially the subject unit. Inland from the bluffs was a mesa that was purchased by Colonel Robert Northam, a manager of the Stearns Rancho Trust.

In 1901, Philip Stanton formed a local syndicate and bought 1,500 acres of Rancho Las Bolsas from Robert Northam for the sum of $100,000. The syndicate organized the West Coast Land and Water Company and on a mesa above Shell Beach laid out streets and lots in a forty acre tract. In drilling a well for domestic water, considerable gas came out of the hole, much to the annoyance of the promoters. In August 1901, the first lots were placed on the market with prices ranging from $100, to $200, each. A number was given away to persons who would agree to build some kind of structure immediately. In 1902, Philip Stanton sold his interest in Pacific City to the Vail-Gates Group of Los Angeles.

Henry E. Huntington, who owned the Pacific Electric Railroad and was a principal stock holder in the Southern Pacific Lines, became interested in Pacific City. His "red cars" were already running to Long Beach and the Southern Pacific owned the rails extending to Newport Beach. Buying an interest in the West Coast Land and Water Co., he extended his red car line along the ocean front from Long Beach and electrified the old railroad line to Newport Beach. A wooden pier was built into the ocean and on the bluff a two-story frame hotel, the Huntington Inn, was erected. An extensive advertising campaign drew attention to Huntington Beach and a real estate boom developed. Lots that had sold for $200 a year before sky-rocketed to $43,000. More land was added to the original townsite. The Huntington Beach Company, comprised mostly of Angelenos, had acquired the remaining holdings. The company's first president, J. V. Vickers, had been a director of the West Coast Land and Water Co., when Stanton headed the syndicate.

The City of Huntington Beach was incorporated February 17, 1909, with Ed Manning as the first Mayor. The original townsite consisted of 3.57 square miles, with a population of 915. There were 542 registered voters.

From 1910 to 1920 the City maintained a slow growth rate. The Huntington Beach Co. operated a ranch raising food grains on some of 1,400 acres they owned. In 1918, they held public land auctions to stay out of debt.

In 1919, Standard Oil Company leased 500 acres of land from the Huntington Beach Co. The first oil well was drilled in what was then the northwest area of the City. This well was known as A-1 and was brought in during August, 1920, producing 91 barrels of oil a day. They continued to drill more wells on their lease and multitude of others moved in with hopes of finding a profitable oil well. Wells sprang up and in less than a month the town grew from 1,500 to 5,000 people.

On November 6, 1920, Standard Oil Co. brought in a significant well known as Bolsa Chica No. 1. An estimated 4,000,000 cubic feet of gas and 1742 barrels of oil were produced per day by this well alone. Standard Oil Co. shipped several hundred men from other fields into Huntington Beach to help contain the overflow of oil. Bolsa No. 1 proved that the Huntington Beach oil field was the most significant discovery and soon the population was over 7,000 persons. Areas as small as a City lot were leased and used for organizing oil corporations. Scores of them were formed and their stock put on the market. The old established oil companies continued to drill more wells.

In 1926, the area between 8th Street and 23rd Street, known as the town lot field, produced a second oil boom. The profits from oil were now available to the owners of these lots. Houses and other structures were moved for the purpose of obtaining oil.

In 1930, oil was discovered and produced from the tideland ocean pool utilizing the whipstock method. The development of this idea proved that oil from a known ocean pool lying off shore could be drilled form the upland by slant drilling, and in the process, preserve the beach and public recreation area. Currently, close to 500 whipstock wells produce approximately 10 million barrels of oil annually (1980). The wells within the unit are a part of this system.

The unit's other primarly utilization is recreation. Pacific Coast Highway was completed in 1925 and provided direct access to the unit. Other than further public improvements and the construction of an apartment complex along the north side of the pier, the unit has remained unchanged. The City of Huntington Beach has placed some riprap along the bluffs from Goldenwest Street to Bolsa Chica in order to prevent wave and tidal erosion.

Esthetics Resources

The unit is a scenic resource comprised of several elements. The entire unit provides a panoramic perspective of the Pacific Ocean. Santa Catalina Island is located approximately 30 miles offshore and is visible much of the time. The unit's area between the municipal pier and Goldenwest Street is relatively flat with ample access to the water edge.

The area between Goldenwest Street and the unit's northerly boundary is characterized by bluffs with difficult access to the beach. This bluff area is not improved with any recreation facilities except with an asphalt path that is adjacent to Pacific Coast Highway. However, these bluffs provide vista points towards the ocean and along the coastline.

The ocean meterological characteristics provide a variety of scenic attributes. The surface is often calm and reflective. However, northern winter storms create an impetus for large surf during winter months. Sunsets along the unit's area are picturesque when the northerly coastline and Santa Catalina Island is silhouetted.

The bluffs that are within the unit have been subjected to tidal and wave erosion. The unit's area between Goldenwest Street and the northerly boundary has large amounts of riprap and concrete slabs placed between the water and the bluff. Reinforced steel bars, rusted pipes and miscellaneous concrete material is highly visible. This area of the unit has bluffs that are not improved for recreation purposes. The top of the bluffs are void of vegetation and evidence of erosion and soil breakdown is apparent. There are a series of oil pumps within fenced areas. Some of these areas have had pumps removed, yet the fencing and ancillary equipment remains. There is a service road that has an asphalt base that connects these oil pumps.

The unit area between the municipal pier and Goldenwest Street has an improved bluff top park. However, there is a series of oil pumps between the bluff and the beach area. A service road connects these pumps. There is a concrete wall that retains the bluff. This wall has been the object of graffiti. The surface of the wall has cracks and is in need of painting. There are overhead utility lines throughout this area. Additionally, there are portable toilets scattered along the service road.

Recreation Resources

The unit serves a local and regional recreation need. The unit has historically provided an area for recreation because of its accessibility. Access to the beach area at the northerly end of the unit is predicated upon the tide. At high tide the water reaches the bottom of the bluffs precluding any use of the beach area. The remaining of the unit's beaches have ample access.

Historically and currently, the unit has been utilized for general beach activities including swimming, surfing, fishing and other recreational activities. The City of Huntington Beach has installed a bluff top park from the pier to approximately Goldenwest Street. This park has not only enhanced the streetscape along Pacific Coast Highway, but has provided for safe bicycle and pedestrian circulation away from vehicular traffic.

The unit's activity can be characterized as destination oriented. That is, it is utilized for a series of recreational purposes because of the sand, water, and its general location. Both passive and active types of recreation characterize its usage. Essentially, it can (and does) accommodate large groups of people for a variety of purposes. The unit experiences intense activity and use during the summer months, specifically on weekends. The activity level drops noticeably during the autumn and winter seasons.

The unit has ample and direct access to Pacific Coast Highway and adjacent neighborhoods. There is on-street parking along all areas within the unit. This is further facilitated by pedestrian stairways between the pier and Goldenwest Street. There are no stairways between Goldenwest Street and the northerly boundary of the unit.

There are possible hazards associated with storm surf, primarily during the autumn and winter months. Riptides and undertows present a constant concern for swimmers and surfers. As previously mentioned, there is a degree of hazard associated with access down the bluff areas between Goldenwest Street and the northerly boundary of the unit.

Reclassification

The unit has been part of the Bolsa Chica State Beach until October, 1986. At that time, the State Parks and Recreation Department reached an agreement with the City of Hunington Beach that provided for the assumption of the maintenance and operation of the unit. The City of Huntington Beach, through existing policies, has proposed to enhance the recreational use of the unit by providing a link between the City's and State's bicycle/pedestrian path, along with additional parking, landscape, permanent restrooms and concession facilities.

This change in responsibility and subsequent plans have necessitated the reclassification of the unit. The following definition of a state park, as stated in the California Public Resources Code (PRC), Section 5001.5 (c), is pertinent in plan formulation for resource management and recreational development:

> "State parks...consists of...areas of outstanding scenic or natural character, oftentimes containing also significant historical, archaeological, ecological, geological or other such values. The purpose of state parks shall be to preserve outstanding natural, scenic and cultural values...
>
> Improvements undertaken within state parks shall be for the purpose of making the areas available for public enjoyment and education in a manner consistent with the preservation of natural, scenic, cultural, and ecological values for present and future generations. Improvements which do not directly enhance the public's enjoyment of the natural, scenic, cultural, or ecological values of the resource, which are attractions in themselves, or which are otherwise available to the public within reasonable distance outside the park, shall not be undertaken within state parks."

The following definition of state recreation units, as established by PRC Section 5001.5 (d), includes references pertinent to plan formation:

> "State recreation units, which consist of areas selected, developed, and operated to provide outdoor recreational opportunities. Such units shall be designed by the State Park and Recreation Commission by naming, in accordance with the provisions of this article relating to classification.

In the planning of improvements to be undertaken within state recreation units, consideration shall be given to compatibility of design with the surrounding scenic and environmental characteristics.

Such areas shall be selected for their having terrain capable of withstanding extensive human impact and for their proximity to large centers of population, major routes of travel, or proven recreational resources such as manmade or natural bodies of water."

No natural preserves are proposed for the unit due to the absence of threatened or endangered plant, animal or any other ecological entity.

Declaration of Purpose

The City of Huntington Beach-State Beach has been established in order to make available to the general population, outstanding natural beach areas, the ocean, and related cultural and esthetic features. It is located within Orange County with ample access from Pacific Coast Highway along its entire length. Additionally, specific policies have been established and implemented that assures this access while maintaining scenic, culture and esthetics resources.

Although it is a relatively small area -100 acres/2.3 miles of coastline - it serves a regional population from Orange, Los Angeles and Riverside Counties.

Zone of Primary Interest

The entire unit, because of its size and uniformity, comprises a single zone of primary interest. Particular concern would be any development or changes that would inhibit or threaten to destroy the aforementioned environmental - both natural and cultural-values.

Resource Management Policies

Management of resources within this unit is regulated by policies, objectives and implementation vehicles established by the City of Huntington Beach and the State of California. These policies are stated in the following paragraphs. Included are previously established policies and directives that are especially pertinent to existing or potential resource problems. This section of the Resource Element will serve to satisfy the requirements pertaining to the development of a Resource Management Plan (PRC Section 5002.2). Additionally, other resource management policies are set forth in the environmental impact element of the unit's general plan. These policies are a synthesis of existing municipal and state policies.

There are no resources which will be eliminated or substantially altered as result of the proposed general plan. The general plan's intent is to preserve and enhance the enjoyment of the scenic and recreational resources of the unit. No natural processes will be disrupted as a result of the general plan.

Natural Resources

Topographic Resources

Topographic Hazard Mitigation: The unit's topography is defined by wave and tidal activity which has created steep bluff areas. The hazards include an eroding bluff edge and steep bluff face. This hazard is accenuated by the increasing number of people.

Policy: The bluff edge should be posted and a protective element be constructed. Seacliff retreat is recognized as a natural process that cannot be permanently stopped.

Monitoring of Topographic Hazards: These bluff areas are the result of natural processes. This should be continually monitored and appropriate action be taken to assure visitor protection.

Policy: A monitoring program should be established that will mark the progress of wave and tidal activity, beach and cliff erosion, and surface cracks along the top of bluff areas. This program should utilize field investigation, periodic reports and photographs.

Hydrologic Resources

Water Quality Control The ocean water quality is monitored by the Regional Water Quality Control Board's National Pollutant Discharge Elimination System (NPDES) permit. Additionally, an injection well system maintained by the County of Orange creates a barrier against salt water intrusion among the aquifers.

Policy: The City of Huntington Beach shall support and maintain an active role in both the RWQCB's and County's water quality programs.

Geologic Resources

Geologic Hazard Mitigation: Hazards such as landslides, seismic events and tsunamis are geologic hazards associated with this area.

Policy: Hazardous or potentially dangerous areas should be posted; and fencing and other protective structures should be provided to assure safety.

Monitoring of Geologic Hazards: The area is known for historic and existing seismic activity. Recognition of these processes and the tracing of their activity will support visitor and infrastructure protection.

Policy: A monitoring program coordinated among various federal, state, county and city agencies should be established and maintained. This program could include field investigations, periodic reports and educational programs.

Seismicity: The Newport-Inglewood Fault is the primary fault responsible for direct seismic activity.

Policy: New structures within the unit shall be designed to withstand a Richter magnitude 7.0 earthquake, with repeatable ground acceleration of 0.33 gravity (g).

Soil Resources

General Erosion Control: Soil erosion has been greatly accelerated by foot traffic and wave and tidal activity.

Policy: Erosion control features should be pursued and implemented. Such features may include, but not be limited to, improved and controlled access routes to the beach area, stratigically placed landscaping and fencing and walls. No new permanent structures shall be placed on the sand.

Littoral Sand Loss: Sand loss exposes shoreline facilities and ocean-facing cliffs to direct wave attack. Littoral sand loss is a regional problem common to the entire Orange County coastline. Monitoring of littoral sand movement and appropriate recommendations concerning where artificial sand replenishment may be beneficial.

Policy: Littoral sand loss is recognized as a major threat to existing recreational resources. The department shall work with other agencies, including the County of Orange Environmental Management Agency, Southern California Association of Governments and the U.S. Army Corps of Engineers, to develop regional solutions to the sand loss problem. Any major program of sand replenishment or retention must consider the regional nature of the problem and and the regional impact of actions taken along a segment of the shoreline.

Plant Resources

General Vegetation Management: There are no known endangered or threatened plant species within the unit. The majority of the plant life is non-native to the area.

Policy: Continue similar landscaping theme throughout unit. Emphasis should be placed on water conservation and appropriate plant material.

Animal Resources

There are no known endangered or threatened species within the unit. Very little animal life exists within the unit.

Marine Life Resources

Protection of Marine Life: Marine life population could be affected by both visitors and oil operations.

Policy: All applicable State Department of Fish and Game regulations pertaining to size, amount and type of species taken shall be posted and enforced. The NPDES permit shall continue to required weekly monitoring reports and all applicable conditions associated with said permit shall be enforced.

Cultural Resources

The unit is within a larger geographical entity that does not contain significant cultural/historical resources. There are no known archaeological or paleontological sites within the unit.

Esthetic Resources

The scenic resources of the unit are of significant importance. They include ocean vistas, Caltalina Island and the municipal pier. Scenic detractions include overhead utilities, portable toilets and wall grafitti.

Policy: The scenic resources shall be protected from obstructive structures and other elements. An implementation program for the placement of utilities underground should be pursued. The bluff walls should maintain an attractive appearance.

Recreational Resources

The unit should continue to have ample access for a wide variety of passive and active recreational uses.

Policy: The unit shall be preserved for recreational uses. Areas within the unit that are improved should be developed in a consistent theme with the existing park improvements.

Bicycle/pedestrian paths should be separated from vehicular roadways.

Adequate and safe access points should be provided from the bluff top area to the beach area. Adequate restroom facilities should located at strategic locations.

Allowable Use Intensity

Allowable use intensity is determined by analysis of three components: 1) the impact of any development and use on natural and cultural resources; 2) visitor perceptions and attitudes; and 3) management objectives.

The first and most important component in determining allowable use intensity involves an analysis of the natural, cultural, and esthitic resources to determine the area's physical limitations for development of facilities, and the ability of the ecosystem to withstand human impact (ecological sensitivity). This analysis is based on a number of considerations, including: cultural and esthetic resources sensitivity; soils and their erodibility and compaction potential; geologic factors, such as slope stability and relief; hydrologic considerations, including the potential for pollution of surface waters, flooding, and depleting surface and groundwater through water use; vegetation characteristics, such as durability, fragility, wildfire hazard, and regeneration rates; and wildlife ocnsiderations, such as tolerance to human activity, wildlife population levels,and stability. Additional considerations in determining ecological sensitivity are: rare and/or endangered plants and animals; unique botanical features or ecosystems; and examples of ecosystems of regional or statewide significance.

The second component, visitor perceptions and attitudes, involves assessing the social objectives of the department, what degree of isolation or corwding is acceptable, and other perceptions and attitudes pertaining to the quality of visitors' recreation experiences. Although these factors are very difficult to quantify, this component's influence is extremely important.

The management objective for this unit is set fort in the statutes defining a state park (see Classification).

The entire unit can be classified as an appropriate area for high intensity use. This provided for the widest range of use extending from hiking ans scenic observation (low intensity) to parking on paved surfaces (high intensity). Table 1 depicts allowable use of sensitive areas.

It should be noted that the aforementioned recommendations and policies pertaining to bluff area northerly of Goldenwest Street would insure safe high intensity use. Until specific measures are taken, the bluffs, bluff edge and wall could be considered constraints to full enjoyment and use of this area.

TABLE 1

Limiting Factors and Allowable Use of Sensitive Areas

Sensitivity	Limiting Factors	Allowable Use
High	Very fragile or valuable cultural resources, very sensitive ecological resources, geologic hazards and land instability.	Light-intensity uses: Birdwatching Hiking Nature study Painting (artistic) Photography Scenic observation
Moderate	Slope stability, moderate eorsion potential, sensitive ecological resources, important scenic resource areas.	Medium-intensity uses: Bicycling (on designated paths) Fishing Picnicking (maximum of two sities/acre) Sunbathing Surfing
Low	Moderate to low erosion potential.	High-intensity uses: Camping Parking (paved) Picnicking (three or more sites/acre) Roads (paved)

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BOLSA CHICA STATE BEACH

GENERAL PLAN AMENDMENT REVISION REQUESTS

Attachment #3

BOLSA CHICA STATE BEACH

GENERAL PLAN AMENDMENT REVISION REQUESTS

The following are recommended revisions to the Bolsa Chica State Beach General Plan Amendment as suggested by comments received during the public review process.

COVER - Title of report:

BOLSA CHICA STATE BEACH GENERAL PLAN AMENDMENT

PAGE 1 - First two sentences of first paragraph:

The ~~project~~ amendment area is known as the State Beach - City of Huntington Beach, It ~~was~~ is ~~formerly~~ formally a portion of ~~the~~ Bolsa Chica State Beach.

PAGE 1 - Project Description

Second Paragraph - Easterly should be westerly.

Third Paragraph - northeast should be northwest.

Fourth Paragraph - southwest should be southwest.

PAGE 1 - Project Description - Add the following after the third paragraph:

The unit is adjacent to the Downtown area of Huntington Beach which is a focused redevelopment area for the City. This area consists of approximately 336 acres and has been targeted for change in both uses and intensity.

The adopted plan designates the seventeen block area between Goldenwest and Sixth Streets primarily for high density residential use with a maximum allowable density of 35 units per acre on a fully consolidated block; this area accounts for approximately 44 acres. Within this section of the area three nodes are designated for visitor-serving commercial uses, totalling approximately 8 acres. These commercial nodes include a two block area between Goldenwest and Twenty-First Streets, a two-block area between Eighteenth and Seventeenth Streets and a one block area between Ninth and Eight Streets. Another visitor-serving commercial area is designated adjacent to the municipal pier. This area includes the five inland blocks facing Pacific Coast Highway between Sixth and Lake Streets and the pier and a portion of the public parking lots. The principal intended uses are hotels, motels, restaurants, theaters, museums, specialty and beach-related retail, and service uses. These uses are located near visitor-drawing attractions such as the Municipal Pier and the beaches, along major access routes from inland areas. Office and residential uses shall be conditional and shall only be permitted if visitor serving uses are either provided prior to other development or assured as part of the development.

Inland from the first block, the plan designates twelve blocks for mixed-use (office/residential) uses, approximately 44 acres. The City's General Plan includes a broad mixed development category intended to encourage maximum flexibility. The Coastal Element refined the category to provide more direction for the types and level of development desired. Two new mixed use categories were developed for the coastal zone.

The intent of the mixed-use office/residential designation is to allow a mix of medium to high density apartments and condominiums with professional office space. This can be accomplished by integrating residential and office uses within the same general area or by vertically mixing these uses within the same building. Limited ancillary retail commercial and service uses are also conditionally permitted; however, the emphasis is on the office/residential mix. To the north of this area approximately 8 acres are designated as general commercial.

Southeast of the Downtown core is another visitor-serving commercial area adjacent to Pacific Coast Highway between Lake and Huntington Streets, approximately 13 acres. The area further south along the highway is another new mixed-use designation, commercial/recreation, approximately 29 acres in size. This designation conditionally allows commercial facilities as a major use and recreational facilities as a support use. The intent is to encourage uses that are open to the public and that capitalize on the beach location.

The areas immediately north of the commercial areas adjacent to Pacific Coast Highway are designated for high density residential uses for a total of 57 acres.

Another designation within the plan is open space recreation which will accommodate passive and active recreational uses. The entire beach area has this designation which encompasses approximately 103 acres.

PAGE 1 - First two sentences of last paragraph:

The City of Huntington Beach has ~~assumed responsibility of~~ an operating agreement with the State to operate this area. ~~from the State of California which has resulted in the reclassification of the unit.~~ In assuming this operational responsibility, the City plans to continue its recreational improvements from Goldenwest Street to northerly municipal boundary.

PAGE 3 - Map to indicate unit area as the area within Bolsa Chica State Beach boundaries.

PAGE 5 - Delete first sentence of first paragraph and replace with the following:

~~The purpose of this Resource Element is to establish goals, objectives and policies in order to preserve, enhance and encourage the recreational use of the unit.~~

The purpose of this Resource Element is to establish long-range goals and policies necessary to protect and perpetuate the natural, cultural, and recreational resource values for which the unit was established.

(0639D)

PAGE 9 - Last sentence under "Plant Life":

No rare or endangered plants have been found in the unit/ but the remnant native species which exist help support migrating sharebirds.

PAGE 15 - Under "Resource Policy Formation" heading, change subheading:

~~Reclassification~~

Classification

PAGE 15 - First sentence of first paragraph under "Resource Policy Formation":

The unit ~~was been part of the Bolsa Chica State Beach~~ was operated by State Park System staff until October, 1986.

PAGE 15 - Third paragraph - Add the following to the second sentence:

There is on-street parking along all areas within the unit, although the existing on-street parking between the municipal pier and Goldenwest Street will be displaced with the proposed restriping of Pacific Coast Highway. ~~This is~~ Existing access....

(0639D)

PAGE 15 - Last paragraph continued to PAGE 16, top of page:

This change in responsibility and subsequent plans have necessitated the reclassification of the unit has brought about the need for an amendment to the General Plan. The following definition of a state park beach, as stated in the California Public Resource Code (PRC), Section 5001.5 (c) (d), is pertinent in plan formulation for resource management and recreational development:

PAGE 16 - Delete second, third, and fourth paragraphs:

"State parks ... consists of ... areas of outstanding scenic or natural characteristics, oftentimes containing also significant historical, archaeological, ecological, geological or other such values ... The purpose of state parks shall be to preserve outstanding natural, scenic and cultural values ...

Improvements undertaken within state parks shall be for the purpose of making the areas available for public enjoyment and education in a manner consistent with the preservation of natural, scenic, cultural and ecological values for present and future generations ... Improvements which do not directly enhance the public's enjoyment of the natural, scenic, cultural, or ecological values of the resource, which are attractions in themselves, or which are otherwise available to the public within reasonable distance outside the park, shall not be undertaken within state parks."

(0639D)

The following definition of state recreation units, as established by PRC Section 5001.5(d), includes references pertinent to plan formation.

PAGE 16 - Delete last paragraph continued onto top of PAGE 17 under "Declaration of Purpose" heading and replace with the following:

The City of Huntington Beach State Beach has been established in order to make available to the general population outstanding natural beach areas, the ocean, and related cultural and esthetic features. It is located within Orange County with ample access from Pacific Coast Highway along its entire length. Additionally, specific policies have been established and implemented that assures this access while maintaining scenic, culture and esthetics resources.

The purpose of Bolsa Chica State Beach is to make available to the people, for their benefit and enjoyment, the scenic, natural, cultural, and recreational resources of the ocean beach and related uplands. Management of the unit shall be to preserve and protect public opportunities for ocean beach-oriented recreation in a high-quality environment.

PAGE 17 - Delete second paragraph:

(Although it is a relatively small area (+/- 100 acres) 2/3 miles of coastline (+/- it serves a regional population from Orange, Los Angeles and Riverside Counties.

(0639D)

PAGE 17 - Delete third paragraph under "Zone of Primary Interest" heading and replace with the following:

~~The entire unit, because of its size and uniformity, comprises a single zone of primary interest. Particular concern would be any development changes that would inhibit or threaten to destroy the aforementioned environmental, both natural and cultural, values.~~

A zone of primary interest is that area outside the unit in which land use and development changes could adversely impact the resource of the unit. This area includes adjacent City of Huntington Beach, the Pacific Coast Highway, and offshore areas. Of particular concern would be any adjacent development that would impact parking in the unit for State Beach users. If it is determined that adjacent development would impact parking in the unit, then a certain number of spaces in the unit shall be set aside during daylight hours for beach users only.

PAGE 17 - Transfer everything under "Natural Resources" heading at bottom of page to PAGE 31 following first paragraph under "Potential Operational Concerns" heading.

PAGE 18 - Transfer everything under "Geologic Resources" heading at middle of page to PAGE 31 following the previously transferred paragraph from PAGE 17.

PAGE 18 - Delete the two paragraphs under the "Monitoring of Geologic Hazards:" heading and replace with the following:

Monitoring of Geologic Hazards: The area is known for historic and existing seismic activity. Recognition of these processes and the tracing of their activity will support visitor and infrastructure protection.

Policy: A monitoring program should be established and maintained. This program could include filed investigations, periodic reports and educational programs.

Monitoring Erosion and Sand Loss: Beach erosion and seacliff retreat have been recognized as serous threats to facilities and use of coastal units of the State Park system. Better baseline information on erosion rates and coastal geological hazards is needed to plan for appropriate land use, resource management, and visitor safety.

Policy: A monitoring program shall be established to document: 1) block falls on and adjacent to beach, 2) landslides, 3) gully development, 4) pavement cracks or building cracks from differential settlement or subsurface movements, and 5) beach elevation and width. The program should include the comparison of historical and recent aerial photos, ground photos with explanations (date, time, tide status), and installation of permanent monuments, if necessary.

Coastal Erosion: Following several years of significant storm damage in many coastal State Park System units, the Department adopted a policy for coastal erosion on October 24, 1984. The intent of the policy is to avoid construction of new permanent facilities in areas subject to coastal erosion, unless the risk of loss is clearly offset by the need for the facility, and to promote the use of expendable or movable facilities in erosion-prone areas. The policy reads as follows:

> The Department of Parks and Recreation shall avoid construction of new structures and coastal facilities in areas subject to ocean wave erosion, seacliff retreat, and unstable cliffs, unless specific determinations have been made that the risk of loss of the facility is clearly offset by the investment and need for the facility. Measures shall be taken to minimize human-induced erosion by reducing: concentrated surface runoff from use areas, elevated groundwater levels from irrigation and urbanization, and surface disturbance of blufftop soils. In recognition of California's actively eroding coastline, new structures and facilities located in areas known to be subject to ocean wave erosion, seacliff retreat, or unstable bluffs shall be expendable or movable. Structural protection and reprotection of developments shall be allowed only when the cost of protection is commensurate with the value (physical and intrinsic) of the development to be protected, and when it can be shown that the protection will not negatively affect the beach or the near-shore environment.

PAGE 19 - Delete the first paragraph at top of page under "Soil Resources" and replace with the following:

General Erosion Control: Soil erosion has been greatly accelerated by foot traffic and wave and tidal activity.

Policy: Erosion control features should be pursued and implemented. Such features may include, but not be limited to, improved and controlled access routes to the beach area, strategically placed landscaping and fencing and walls/// No new permanent structures shall be placed on the sand.

Bluff Setbacks: That seacliff retreat is an ongoing process should be taken into consideration when designing and placing facilities near bluff edges. To protect investments in facilities, minimize the need for coastline protective devices, and assure public safety, it is a sound principle to establish setback zones -- both "zones of demonstration", where facility development is precluded, and "zones of demonstration", where facility development is allowable if stability and geologic suitability can be demonstrated.

Policy: A zone of exclusion shall be established to include the base, face, and top of all bluffs extending inland to a plane formed by a 45-degree angel from the horizontal at the base of the bluff. No new structures shall be constructed within this zone unless they are either movable or expendable. Existing facilities may remain in use subject to regular inspections.

A zone of demonstration shall be established in the unit to extend inland from the zone of exclusion to the intersection of the ground surface with a plane inclined 20 degrees from the horizontal from the toe to the bluff.

Shoreline Protection Devices: Although structural protection measures are not consistent with the general objectives for resource management within the State Park System, in certain circumstances, when the public facility is of greater necessity and importance than the natural resources which may be negatively affected, structural protective measures may be appropriate.

Policy: Structural protection measures shall be undertaken only if non-structural measures (i.e., relocation of facility, setback, redesign, or beach replenishment) are not feasible. If a protective structure is constructed (i.e., riprap at the base of the seawall or construction of a new seawall), the structure shall not:

1. Significantly reduce or restrict beach access;
2. Adversely affect shoreline processes and sand supply;
3. Significantly increase erosion on adjacent properties;
4. Be placed further than necessary from the development requiring protection; or
5. Create a significant visual intrusion.

PAGE 19 - Plant Resources - Add the following sentence to the end of the policy under General Vegetation Management:

Policy: Introduction of non-native plants shall be limited to the greatest extent practicable.

Policy: A plant list shall be prepared and submitted to the Department of Fish and Game for review.

PAGE 19 - Add the following policy under "Animal Resources":

Policy: Pursue a more detailed inventory of wildlife values during ideal conditions as governed by tides, time of year, weather conditions and human disturbance factors. The inventory should be conducted four times during the year (spring, summer, fall, winter) during early morning hours and during low tide.

Policy: Limit improvements which could encourage human activity in the sand dune area at the northern portion of Area Three and explore development of the area as a natural area for native migratory and resident water-associated birds either in Area III or in the area immediately north of Area III.

Policy: Prohibit dogs not on a leash in the sand dune area at the north of Area Three.

Policy: Prohibit trash recepticles in sand dune area of the north of Area Three.

PAGE 20 - Fourth paragraph/policy under "Esthetic Resources", add the following sentence after the first sentence in the paragraph:

Policy: The scenic resources shall be protected from obstructive structures and other elements. All new developments shall be designed to enhance view opportunities and to the greatest extent practicable, maintain existing scenic views of ocean and shoreline from the Pacific Coast Highway. An implementation program for the placement of utilities underground should be pursued. The bluff walls should maintain an attractive appearance.

PAGE 21 - Third from last paragraph (one-sentence paragraph):

The management objective for this unit is set forth in the statues defining a state ~~park~~ beach (see Classification).

PAGE 23 - Land Use Patterns of Surrounding Area - Add the following sentence to the end of the paragraph:

The Introduction section of this document provides a more detailed description of surrounding land use patterns.

PAGE 23 - Second from bottom paragraph under "Ownership" heading:

With the exception of the residential stock cooperative located in Area I, the entire unit is owned by the State of California with various ~~lease agreements with industrial (oil) and residential (condominiums)~~ utility easements.

PAGE 24 - Under Area II, add the following sentence to the end of the first paragraph:

Mobile concession vendors were also introduced into this portion of the unit on a trial basis for the summer of 1987.

PAGE 24 - Add the following items under Area I needs:

- Permanent restroom facilities
- Concessions

PAGE 24 - Add the following items under Area II needs:

- Permanent restroom facilities
- Concessions

(0639D)

PAGE 24 - Area III Needs, modify the first item as follows:

Off-street parking is needed to replace the on-street parking on Pacific Coast Highway which is scheduled to be removed south of Goldenwest Street.

PAGE 26 - Modify first sentence as follows:

- There are ~~no/clearly/identified~~ limited points of access from the bluff top to the beach.

PAGE 26 - Bottom of page, first paragraph under "Area I":

- Construct a ~~tri-level~~ multi-level parking structure on the existing parking lot site consistent with Esthetic Resources policy. (This structure will not extend above the elevation of PCH or beyond the existing bicycle path and will be designed to (enhance view opportunities and to the greatest extent practicable) maintain existing scenic view of the ocean and shoreline from Pacific Coast Highway.

PAGE 26 - Bottom of page, second paragraph under "Area I":

- Provide for passive (surf museum) and active (volleyball, basketball, etc.) recreation both within and on top of the parking structure respectively. If necessary, prepare a

feasibility assessment for the surf museum according to Department of Parks and Recreation standards.

PAGE 26 - Add the following items under Area I Facility Recommendations:

- Expand the decking area on the north side of the pier to accommodate new food concessions.
- Place utility lines underground.
- Provide for lifeguard facilities.

PAGE 27 - Add the following items under Area II Facility Recommendations:

- Place utility lines underground.
- Provide for screening of oil facilities in area.
- Provide for separation of vehicular and pedestrian traffic where feasible. Investigate the feasibility of a pedestrian overpass at both Goldenwest and 11th. Streets.
- Provide for lifeguard facilities.

PAGE 27 - Add the following items under Area III Facility Recommendations:

- Place utility lines underground.
- Provide for viewing areas and seating benches.
- Install permanent restroom facilities at selected locations.

(0639D)

- Investigate extending City beach into boundary of developed unit of the Bolsa Chica to provide for enhancement and preservation of shorebird habitat area.
- Provide for lifeguard facilities.

PAGE 27 - Bottom of page, after the first paragraph under "Unresolved Planning/Environmental Issues", add the following paragraph:

In Area I, there is a potential parking conflict between State Beach users and others visiting adjacent areas. A parking management plan that maximizes the parking opportunities for beach users will need to be approved by the Department prior to construction of the parking facility at the State Beach.

PAGE 27 - Last paragraph at bottom of page, last sentence:

It is necessary to monitor this erosion in order to ~~prevent damage to~~ determine proper siting, consistent with bluff setback and shoreline erosion policies, for future improvements.

PAGE 29 - After first paragraph under "Interpretive Themes" at middle of page, add the following paragraphs:

Cultural History - The flow of history from Native American to Hispanic to American period and how Bolsa Chica became a unit of the State Park System. The story of oil discovery in the region ad early coastal recreation is similarly overlooked.

Natural History - Topics of interest may include how a beach is created, sand movement and replenishment, ocean tides and currents, shore birds, etc.

PAGE 29 - Second from last paragraph, second sentence under "Cultural Significance of Surfing":

The museum, if after further study it is determined to be appropriate, would include a chronological depiction of the sport as well as its current impacts on music, fashion and recreation.

PAGE 36 - Noise - Add the following sentence to the end of the last paragraph:

A secondary source of noise impacting the Area III unit is the Shell Oil operation on the inland side of Pacific Coast Highway, north of Goldenwest Street. Oil drilling and reworking operations and helicopter traffic create intermittent noise impacts.

PAGE 37 - Traffic/Circulation, in the first paragraph, (330) spaces should be (315) spaces.

PAGE 37 - Section from last paragraph, second sentence:

Off-street parking will be provided by the proposed parking structure ~~(approximately/500/cars)~~, parking stalls along the existing service road in Area II ~~(approximately/173/cars)~~ and near the intersection of Goldenwest Street and Pacific Coast Highway. ~~(approximately/200/to/300 cars)~~/in Area III.

(0639D)

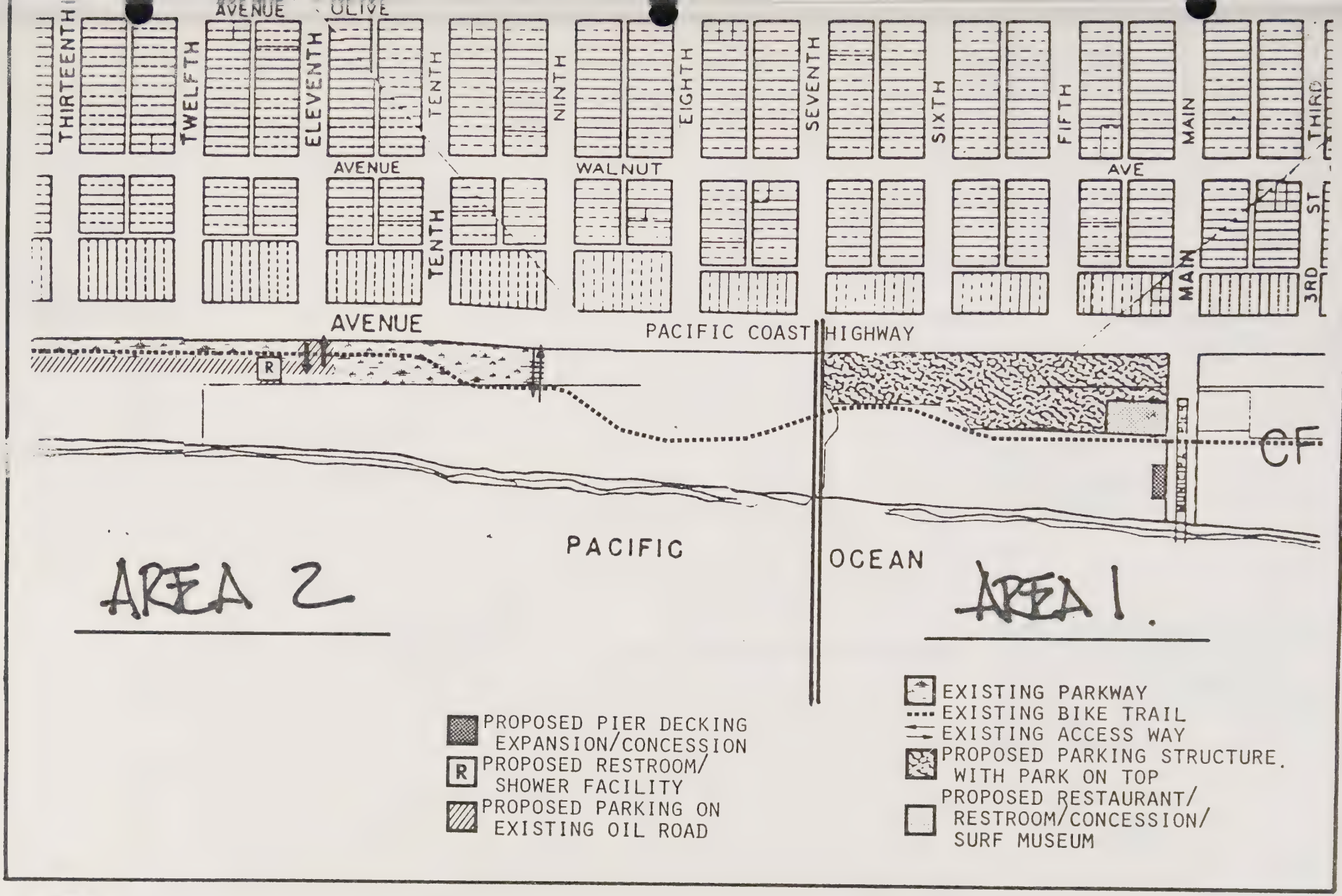
BOLSA CHICA STATE BEACH GENERAL PLAN

SUPPLEMENTAL GRAPHICS

CITY OF HUNTINGTON BEACH

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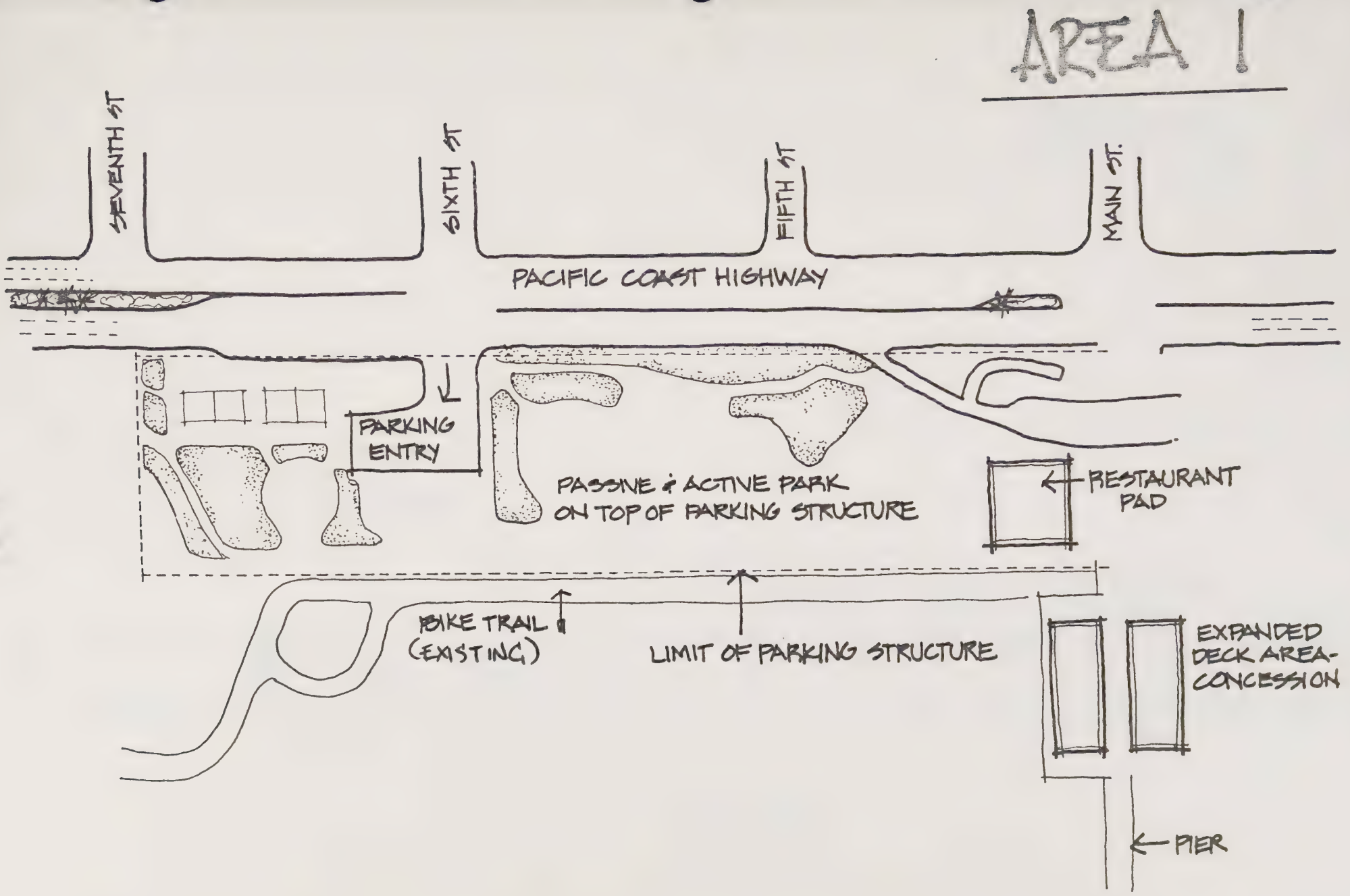
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HUNTINGTON BEACH CALIFORNIA
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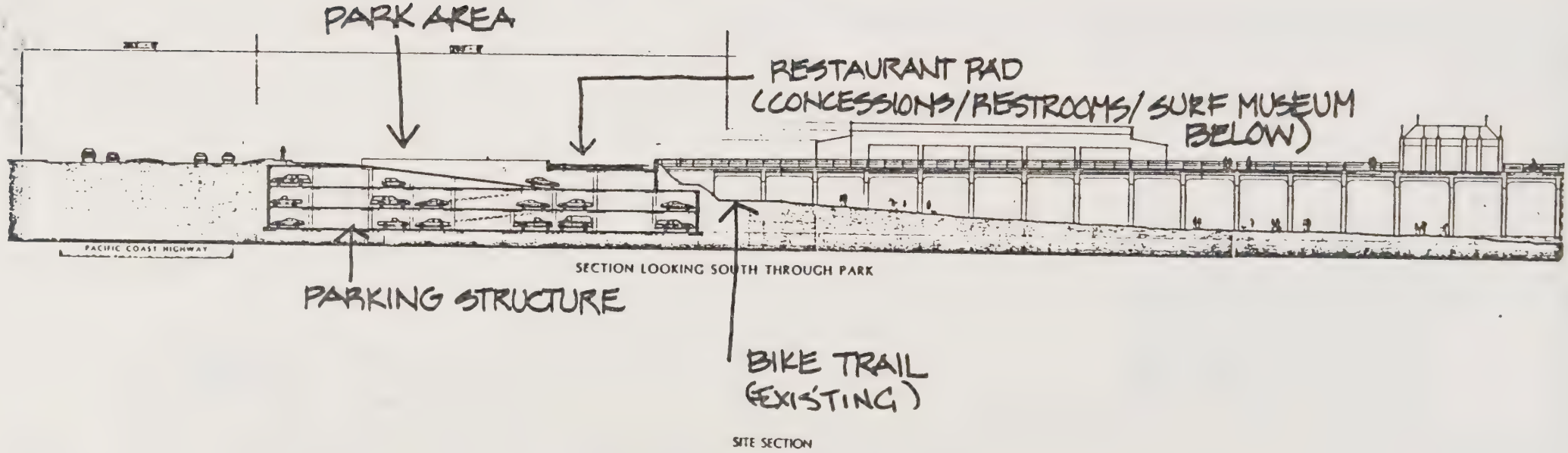
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AREAS ONE AND TWO

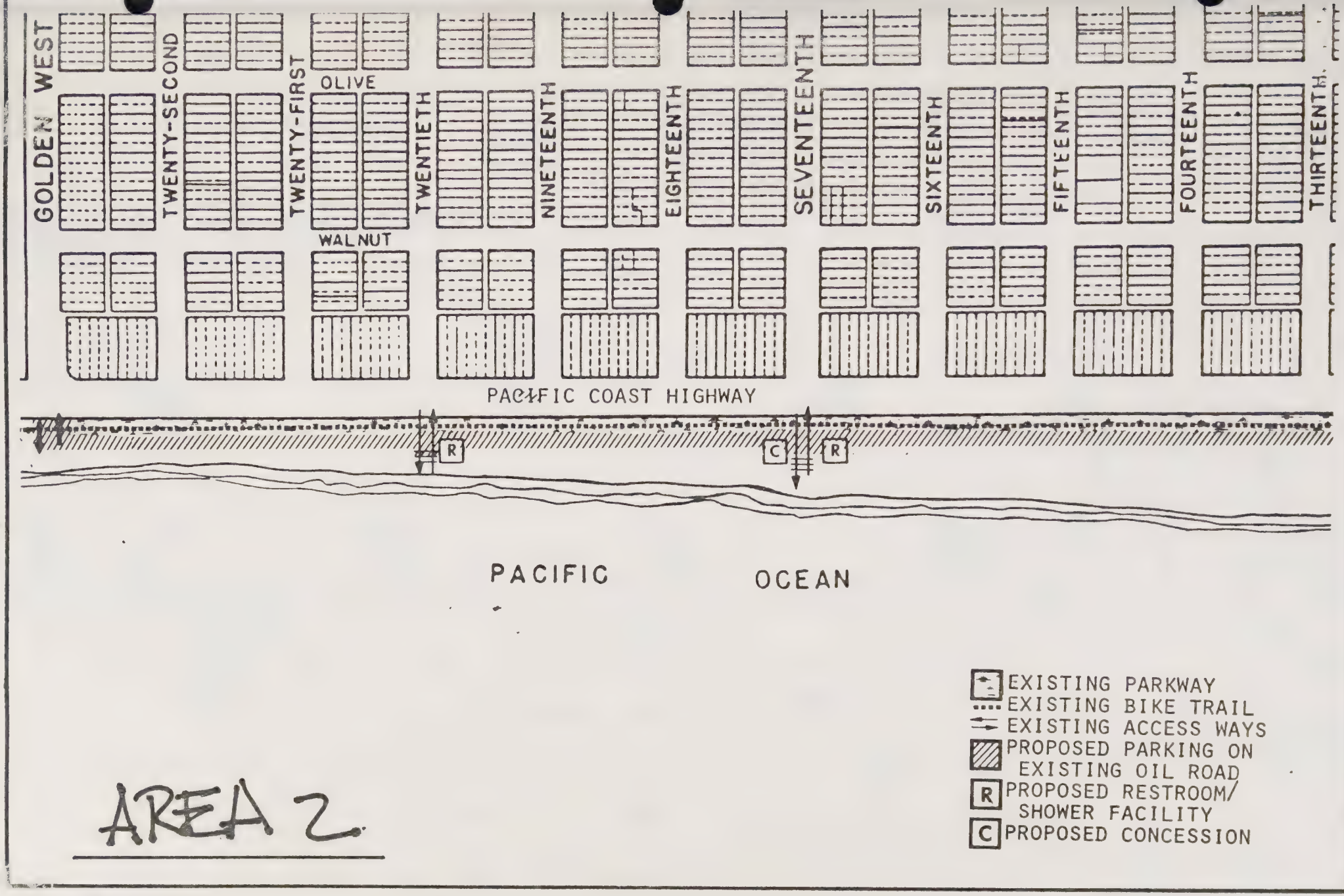


TYPICAL SITE PLAN - AREA I

AREA 1.



TYPICAL SECTION - AREA I

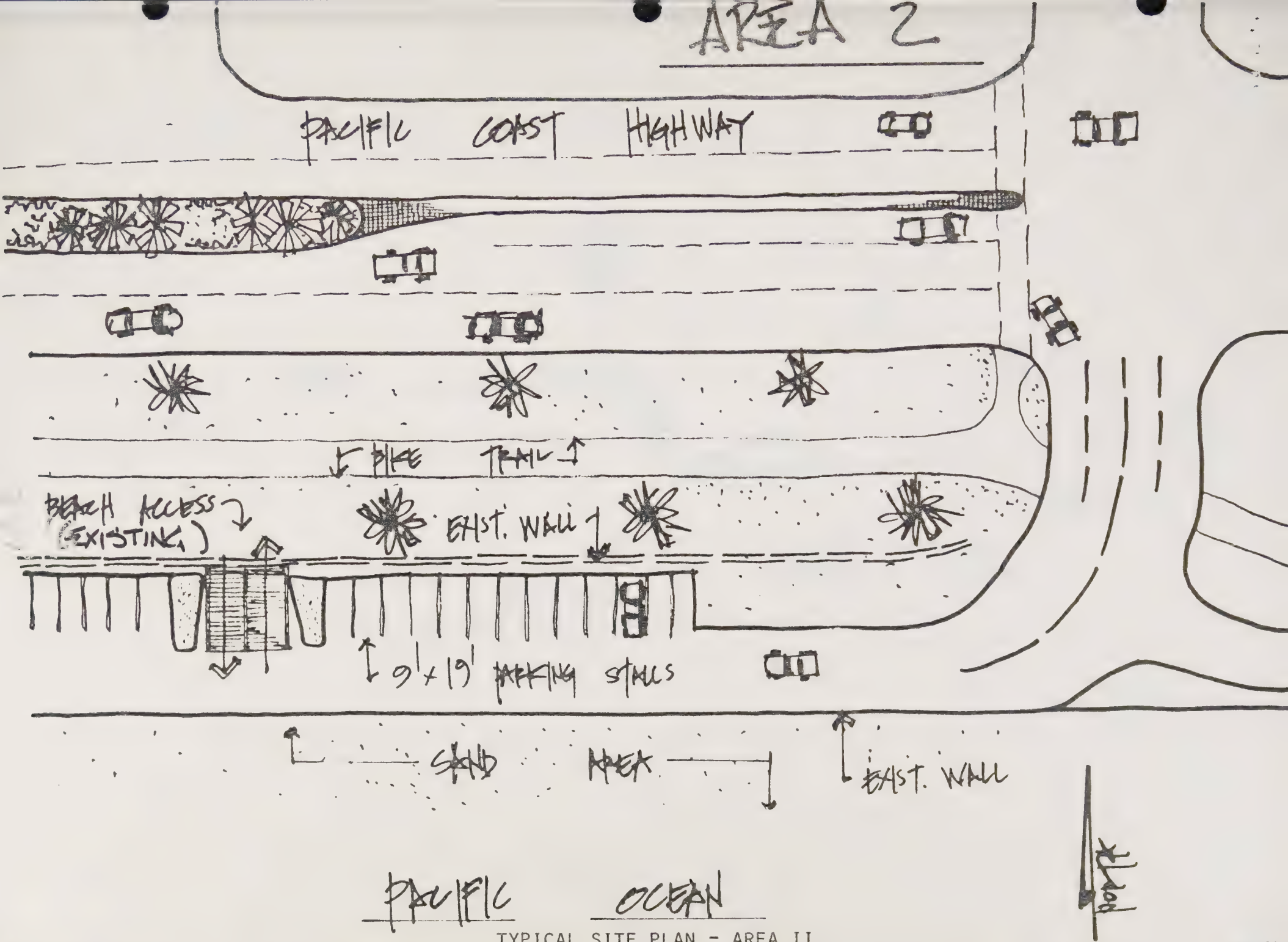


AREA 2

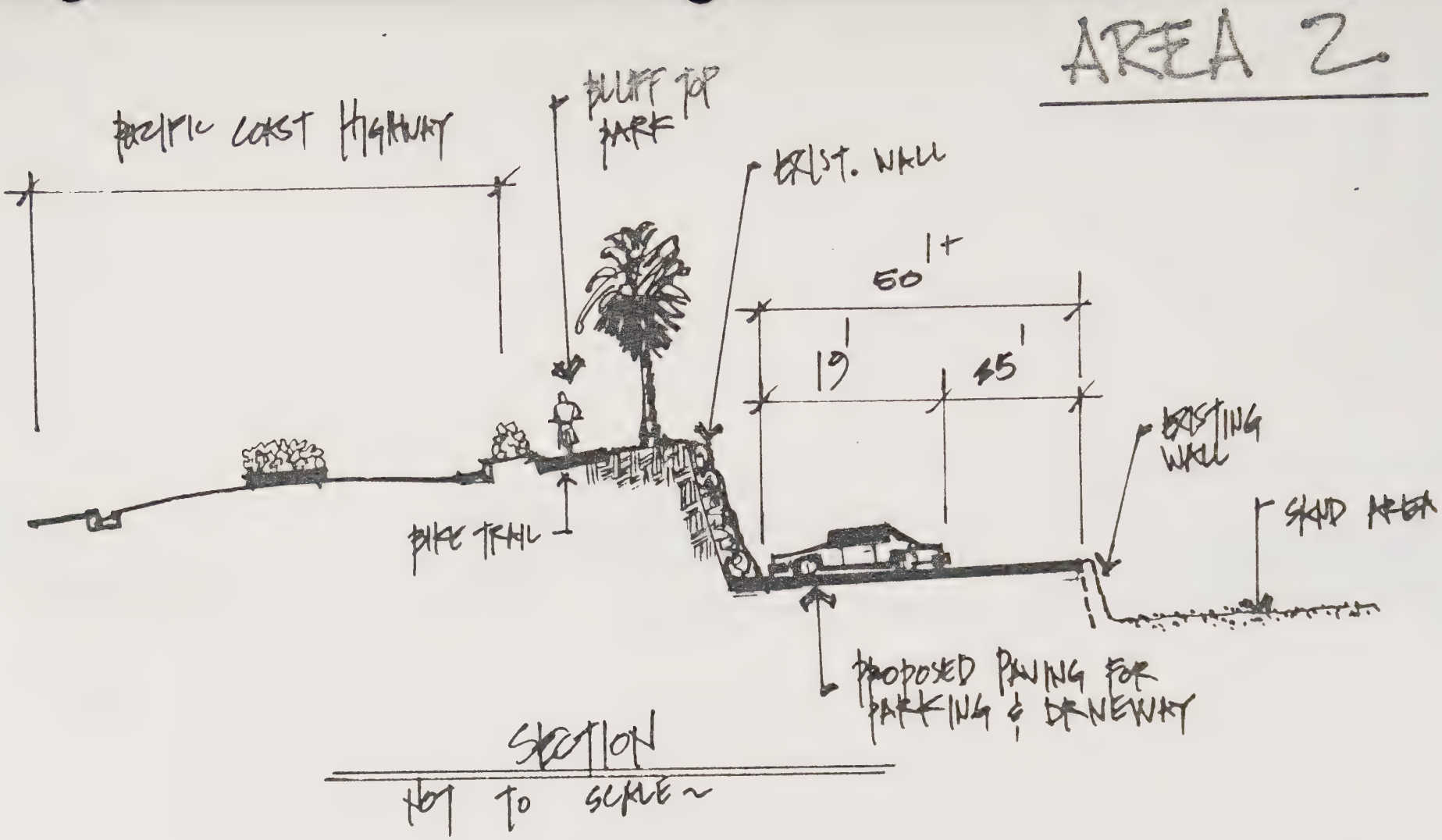
HUNTINGTON BEACH CALIFORNIA
PLANNING DIVISION

EXISTING AND PROPOSED USES

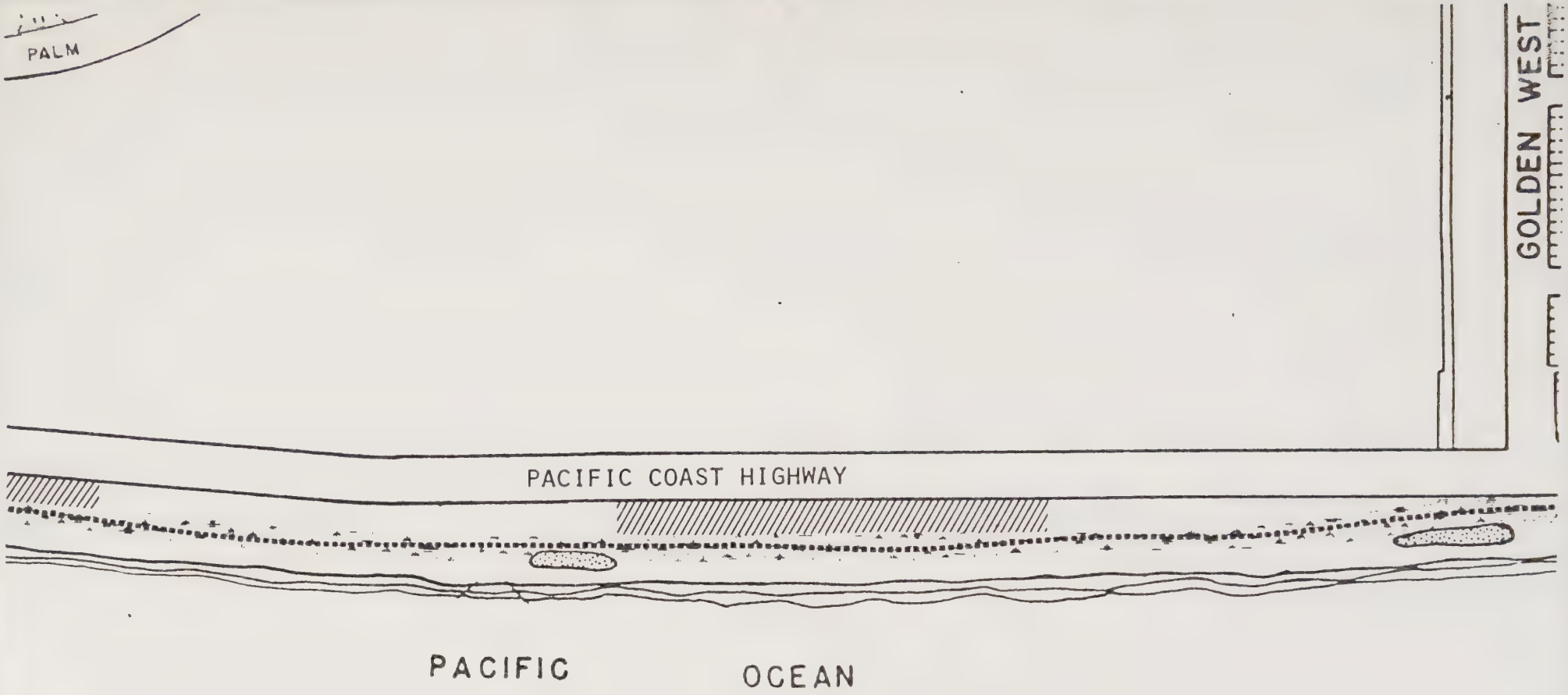
AREA TWO CONTINUED



TYPICAL SITE PLAN - AREA II



TYPICAL SECTION - AREA II

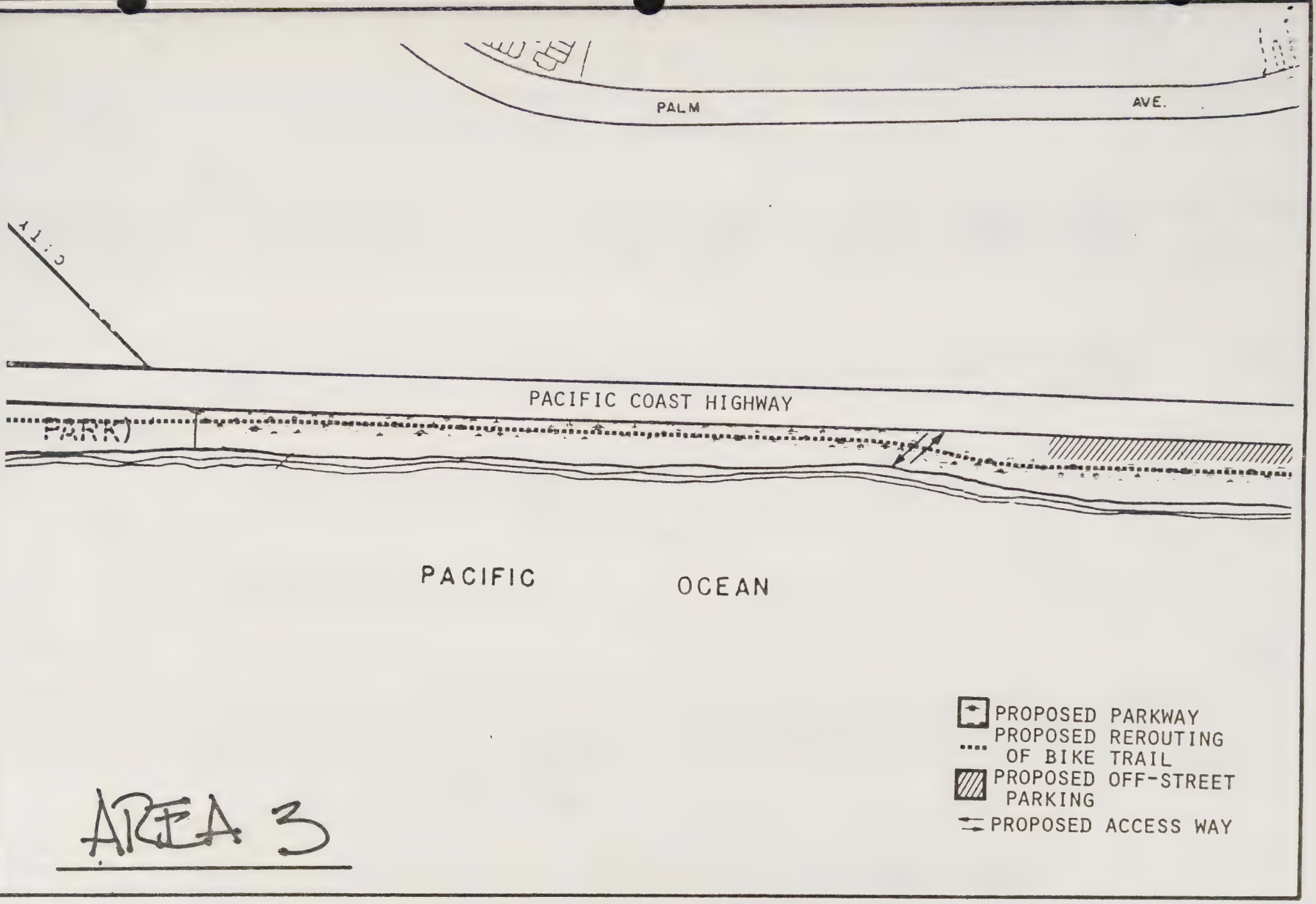


AREA 3

HUNTINGTON BEACH CALIFORNIA
PLANNING DIVISION

EXISTING AND PROPOSED USES

AREA THREE CONTINUED



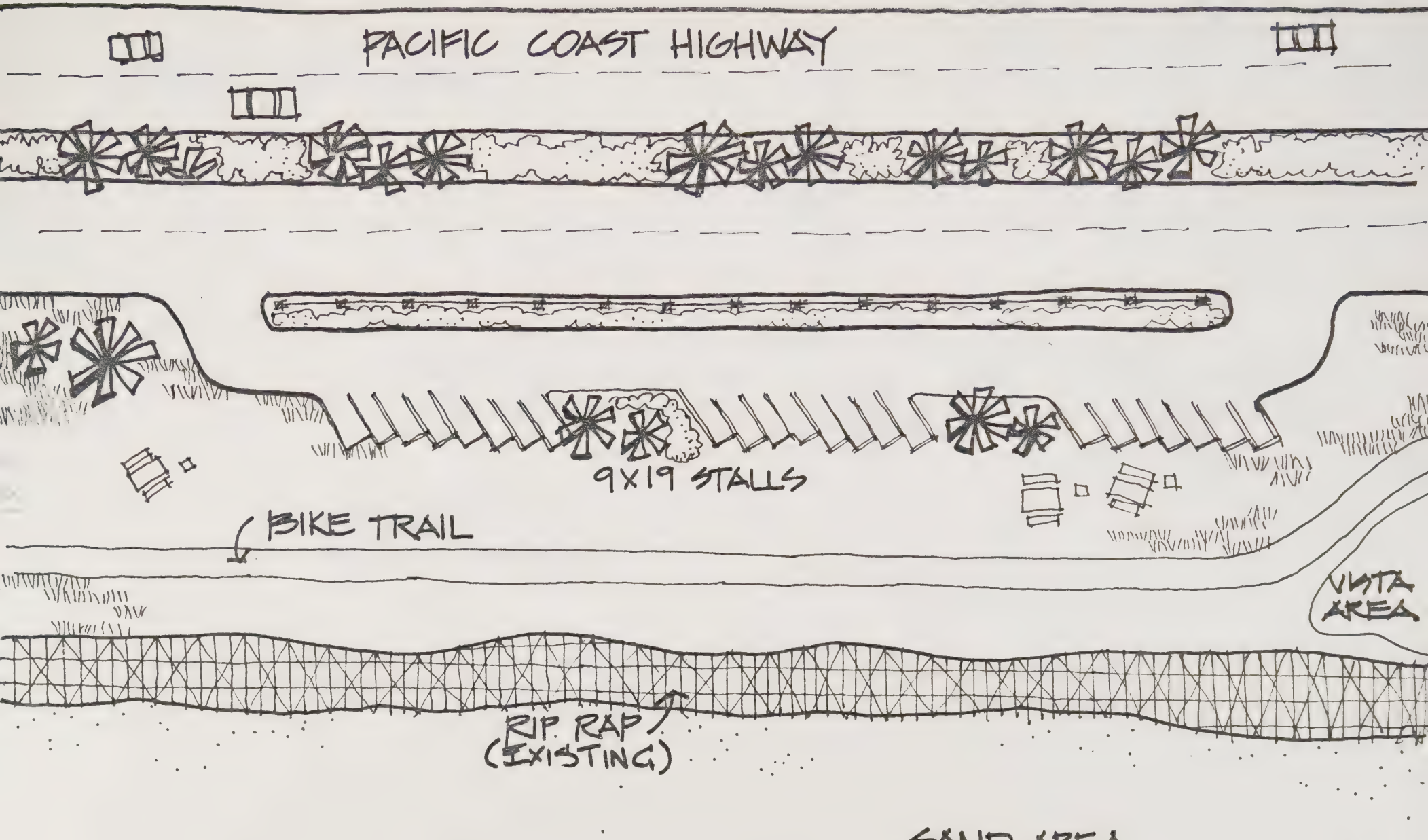
AREA 3

HUNTINGTON BEACH CALIFORNIA
PLANNING DIVISION

EXISTING AND PROPOSED USES

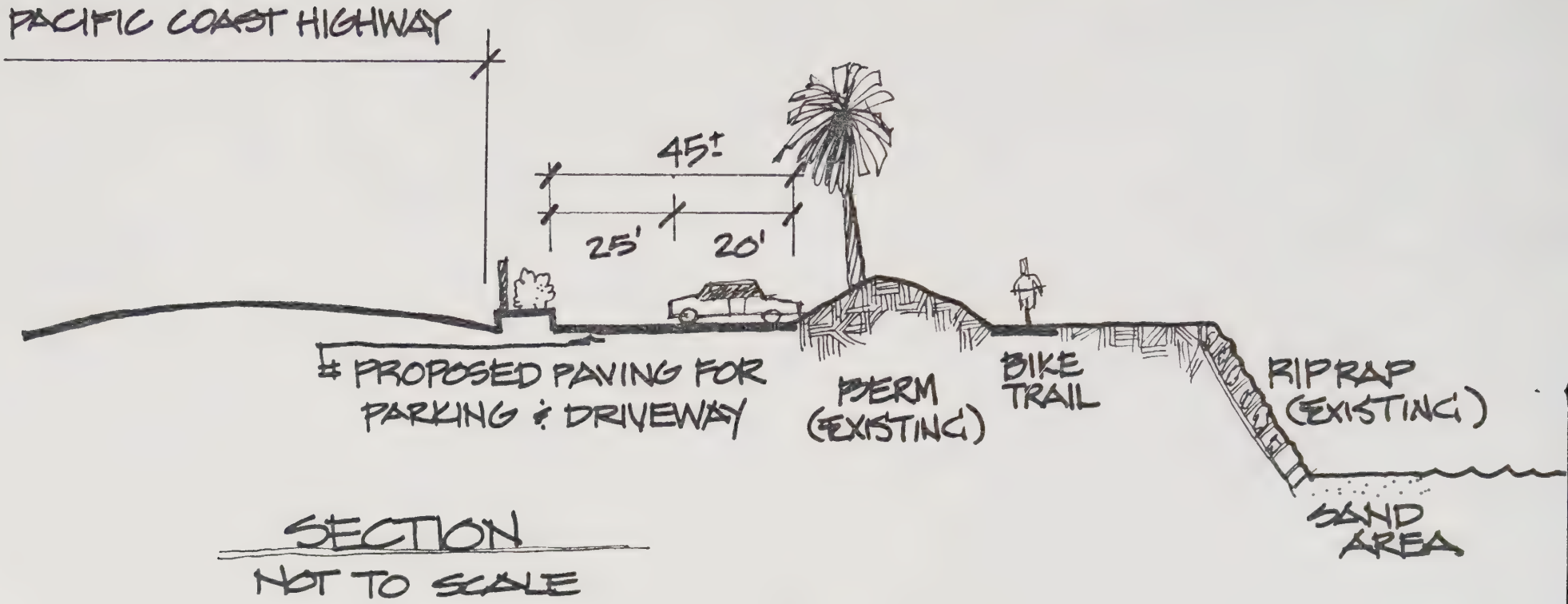
AREA THREE

AREA 3



TYPICAL SITE PLAN - AREA III

AREA 3



SECTION

NOT TO SCALE

TYPICAL SECTION - AREA III

INSTITUTE OF GOVERNMENTAL
STUDIES LIBRARY

FEB 9 1988

UNIVERSITY OF CALIFORNIA

RESPONSE TO COMMENTS

During the circulation and review period, the City of Huntington Beach transmitted comments regarding the State Beach General Plan to the consultant for review and response.

The format used for the response to comments is to provide a copy of the actual correspondence followed by a consultant-prepared response. All comments have been noted and an appropriate response has been prepared.

ATTACHment #4

August 23, 1987

Mr. Hal Simmons
Planning Department
c/o City Clerk - City Hall
2000 Main St
Huntington Beach Ca 92648

Dear Mr. Simmons

As a Concerned resident I wish to congratulate the city on the Proposed parking structure for the North side of the pier. We certainly need additional parking however we must not burden each with an ugly garage.

We urge you to follow the Coastal Plan of keeping the top of the structure one ft. below the grade of Pch and be constructed that the top of the structure may be used and so dedicated by the city as a park.

I would like to help in any way I can

Yours truly E.D. Carlson
227-9th
H.B. 92648

1

RESPONSE TO COMMENTS BY E.D. CONLON,
227 9TH STREET, HUNTINGTON BEACH, CA 92648
RECEIVED AUGUST 28, 1987

1. This comment has been received. Ultimate design and use of the top of the proposed parking structure will be determined at a later date by the City of Huntington Beach and various state agencies.

August 22, 1987

Hal Simmons
Planning Dept
2600 Main Street
Huntington Beach Calif, 92648

Dear Sir:

It is my understanding that on October 8th, there will be a hearing by the City Council on "Torath of the Pier Resource and Inventory General Development Plan", as a Concerned Resident of Huntington Beach I am making my input:

1. I would like to see the North Side made into a park, the South Side is going to be screwed up with buildings, 1
2. If you and the developers really have to have a parking structure, please make the top of the structure below the level of the Pacific Coast Highway. This way the view of the ocean will not be obstructed. 2
3. Oh yes I would like the title on this land to designate it for the park for now and forever so that we don't have to go thru this process everytime the council changes ~~so~~ or the developers start getting the screws on, 3

In my opinion one of the outstanding features of H.B. is the fact its shoreline is not screwed up like our neighbors to the North and South of us.

Sincerely
Henry W. Bohrman

Henry W. Bohrman
21112 Poston Lane
Huntington Beach,
CA 92646

RESPONSE TO COMMENTS BY HENRY J. BOHRMAN,
21112 POSTON LANE, HUNTINGTON BEACH, CA 92646
RECEIVED AUGUST 28, 1987

1. The general plan does indicate that the primary use will be a linear park with ancillary uses supporting the park and the general beach area.

2. This comment has been received. Ultimate design and use of the top of the proposed parking structure will be determined at a later date by the City of Huntington Beach and various state agencies.

3. Dedicating park area or similar open space uses in perpetuity can occur with the consensus of various agencies and property owners. Often, a charitable organization is established in order to receive such a dedication.

2 PC
7 / 7- Comm
1- Admin
1- LA Public Lib

Barbara Chunn
80 Huntington St #722
Hntg Bch, Ca. 92648

Hal Simmons
Planning Dept
City of Huntington Beach

Dear Sir,

As a concerned resident I would like to state for the record that the proposed parking structure north of the pier will be one foot below PCH and will not obstruct the ocean view. The top of the parking structure should be dedicated forever as a park.

Reference to north of pier resource inventory and general development plan.

Sincerely,

RESPONSE TO COMMENTS BY BARBARA CHUNN
80 HUNTINGTON STREET #722, HUNTINGTON BEACH, CA 92648
RECEIVED AUGUST 28, 1987

1. This comment has been received. Ultimate design and use of the top of the proposed parking structure will be determined at a later date by the City of Huntington Beach and various state agencies.

August 22, 1987

Mr. Hal Simmons
Planning Dept., c/o City Clerk (For the Record)
2600 Main Street
Huntington Beach, Ca. 92648

Dear Mr. Simmons:

This letter is in regard to the North of Pier Resource and Inventory and General Division Plan.

My wife, Elvira W. Cravagan, M.D. and I want to go on record that we wish that the top of the North Side of the Pier Parking Structure be dedicated forever for a park. The parking structure should be one foot below the Pacific Coast Highway so as not to obstruct the view of the ocean.

We would hope that no structure would ever be built on the public beach to block the view of the ocean.

Let's develop without destroying our natural assets!

Sincerely,

Elvira W. Cravagan M.D.

James W. Cravagan

Elvira W. Cravagan, M.D.
James W. Cravagan

RESPONSE TO COMMENTS BY DR. AND MRS. CRAVAGAN
RECEIVED AUGUST 28, 1987

1. This comment has been received. Ultimate design and use of the top of the parking structure will be determined by the City of Huntington Beach and various state agencies.

8/26 1- PLANNING
1- ADMINISTRATION
1- MIKE ADAMS
X- SCOTT HESS
1- KAREN ATWELL
CATHY
HAL

LORRAINE FABER
15271 Nottingham Lane
Huntington Beach, California 92647

August 22, 1987

Dear City Council Members:

Having received the State Beach General Plan dated 8/13/87, in yesterday's mail allowed me only one day for review prior to leaving on vacation but I did wish to express my concerns related to the document.

1 I am disappointed in the vagueness of the document. At this point, it would be difficult to pinpoint whether this is attributable to City Staff instructions (or lack thereof) or the consultant firm's inexperience.

2 Although existing conditions and history are more than adequately described in the General Plan, there is no mention of proposed development adjacent downcoast and inland. In my opinion, such omission is a fatal flaw.

3 Although the document suggests need to reclassify the unit and two classifications are mentioned, it is ambiguous as to
4 which is being proposed; Section 5001.5(c) "State Park" or Section 5001.5(d) "State Recreation Unit". How each of the three sub-areas should be designated is also unclear. No discussion is included on what other state classifications
5 were available or why they would have been less appropriate classifications.

6 While the State General Plan mentions that there is a redevelopment overlay inland of PCH and downcoast, there is no mention of same in regards to Area I. In fact, it brings into question whether it is legal or appropriate to have included state property in a local agency redevelopment zone.

7 On page 21 the General Plan comes closest to explaining the City's mission in regards to planning and management efforts:

> "The management objective for this unit is set forth in the statutes defining a state park (see classification)."

Then in the next paragraph the document contradicts itself saying:

> "The entire unit can be classified as an appropriate area for high intensity use" (this is followed by reference to table one (page 2). The table by title is limited to uses in highly sensitive areas and includes only low-cost, relatively passive activities.

The table effectively brings the reader back full circle as not even one commercial activity is listed.

I can not accept the inconsistency built into page 26 descriptions of facility recommendations with either a state park classification or the table listings. If the city plans a 20,000 square foot up-scale restaurant pad, (as per contractual commitments and Coastal Commission permit application) in Area I, let the document say so. If the tri-level parking structure is to be partially subterranean, let the document explain how you can tri-level without exceeding the street level height.

If the "commercial (food) pad" on top of the parking structure is to be two-level, let the document say how high it can be built above street level.

The traffic/Circulation title on page 37 says approximately 500 car spaces will be provided in the parking structure to replace those on the existing lot and on street parking spaces to be lost. There is no explanation in regards to the total number of spaces in the proposed parking structure or their intended use. If the additional 1,300 spaces are to be used to satisfy commercial needs of Pierside I and/or inland commercial zones, the General Plan should so state.

I have problems with pages 40 and 41. In paragraph one, page 40, the statement is made that the General Plan is consistent with District 10 regulations without descriptions of applicable regulations or reference to appropriate document and pages. (I have previously expressed my displeasure at the City's approval of Pierside I heights which are based upon an exception clause in the Local Coastal Plan that is titled "Notation:".)

The page 41, paragraph 4, statement as follows is on its face false:

> "The general plan is essentially an extension of existing uses."

In conclusion, I respectively ask that you delay approval of the submitted State General Plan before you, and that you further instruct the staff what you expect to find in future draft documents.

Respectfully yours,

Lorraine Faber

Lorraine Faber

LF/mc

P.S. Wouldn't it be possible for the City Staff to obtain a few sample (approved) State General Plans for similar beach units so that the City Council and the local public would have a comparison yardstick?

13

RESPONSE TO COMMENTS BY LORRAINE FABER,
15271 NOTTINGHAM LANE, HUNTINGTON BEACH, CA,
RECEIVED AUGUST 28, 1987

1. The intent of a general plan for reclassification purposes is to portray conceptual utilization of the unit. It is not a concise site development plan. One of the functions of this document is to generate public input at the conceptual stage that will eventually be considered for the site development phase.

2. Public Resources Code Section 5001 et seq. establishes that resource documentation and general plan be completed for the area that is being reclassified. Although, adjacent areas will have various impacts on the reclassified area (unit) it is necessary to confine the primary discussion to the specific area. The Resource Inventory and previously prepared documents (e.g. Downtown Specific Plan and EIR, Pacific Coast Highway Widening Project EIR/EIS, Local Coastal Element, etc.) contain information for adjacent areas. These documents have been, and are, available for public review at the City's Department of Development Services and public libraries. Additionally these documents have been cited within the Resource Inventory and Resource Summary and have been incorporated by reference in accordance with Section 15150 of CEQA Guidelines.

3. The terms state beaches, state parks, and state recreational units are not mutually exclusive and can often be applied to the same area. The Resource Documentation Guidelines (provided by the State Department of Parks and Recreation) encouraged the citing of generally relevant sections of the Public Resources Code.

The term "State Recreation Unit" is the generic term requested by the State Department of Parks and Recreation in the preparation of general plans.

4. The sub areas were delineated by the varying degrees and characteristics of the proposed changes.

5. Other "state classifications" include State Seashores, State Wilderness Areas and State Preserves. These classifications are determined by the State. The particular unit does not qualify for the aforementioned classification due to several characteristics including size, use and natural/ecological elements.

6. The General Plan (pg.40) does relate Area I to District 10 of the Downtown Specific Plan. Additionally, Area II is noted as being in District 11 of the Downtown Specific Plan. The issue of a local agency's "legal" or "appropriate" ability to zone state property is moot. The State grants zoning authority to local agencies in accordance with Section 65800 of the California Government Code - ". . . it is the intention to provide only a minimum of limitation in order that counties and cities may exercise the maximum degree of control over local zoning matters." Furthermore, various State agencies have reviewed, approved and endorsed several land use regulatory documents concerning the specific area over the past several years.

7. It appears that Table 1 of the General Plan was misread. That is, areas that have a high degree of <u>sensitivity</u> (ecologically), should only be subjected to relatively passive uses. The issue of "low-cost" activities is not recognized within the State Guidelines

8. In reference to the previous response, the issue of "inconsistency" has not been determined. The precise size and height of the proposed commercial structure (if any) has not been decided. There is a draft plan of the proposed parking structure that indicates that three (3) levels of parking can be designed so that the top level is at or below the grade level of Pacific Coast Highway. This rendering was an exhibit at the regularly scheduled meeting of the City of Huntington Beach Planning Commission held on August 4, 1987.

9. Should a commercial building be permitted on top of the parking structure, the final height will be the result of negotiations between the City, various state agencies, the general public and the developer. That is, the final height of the proposed commercial building is not known at this time.

10. There are no final construction drawings for the proposed parking structure, therefore, an absolute number of space cannot be determined. As mentioned in the general plan, the primary intent of the new parking is to replace the on-street parking that will be removed as the result of widening Pacific Coast Highway. These spaces currently serve those who utilize the beach area. Therefore, the proposed parking structure will be for those who utilize the beach area.

11. Both the Public Resources Code and the California Environmental Quality Act (CEQA) discourages redundancy by encouraging incorporation by reference of existing environmental and land use documents. The height limit for Distict 10 is twenty-five feet and no more than two (2) stories above the pier level pursuant to Section 4.12.04 of the Downtown Specific Plan.

12. This comment represents an opinion.

13. Previous general plans for beach areas have been prepared by the State Department of Parks and Recreation and are available at public and university libraries and at the California State Department of Parks and Recreation, Resource Protection Division, P.O. Box 2390, Sacramento, CA 95811.

August 31, 1987

Mr. Hal Simmons
Planning Department
C/o City Clerk, for the record
2000 Main Street
Huntington Beach, CA 92648

Ref: North of the Pier
Resources & Inventory
Gen. Development Plan

Mr. Simmons:

As a registered voter and a resident of Huntington Beach for over ten years I am concerned about the development of our city.

I feel the top of the parking structure planned to be built north of the pier should be dedicated forever as a park. I feel this structure should be one foot below the level of Pacific Coast Highway so as not to obstruct the view of the ocean.

My opinion is stated for the record.

Sincerely,

Gene H. Chaney

Gene H. Chaney
5912 Midway Drive
Huntington Beach, CA
92648

RESPONSE TO COMMENTS BY GENE H. CHANEY
5812 MIDWAY DRIVE, HUNTINGTON BEACH, CA 92648
RECEIVED SEPTEMBER 8, 1987

1. This comment has been received. Ultimate design and use of the top of the proposed parking structure will be determined at a later date by the City of Huntington Beach and various state agencies.

20771 Aquatic Lane
Huntington Beach, CA 92646
August 27, 1987

Dear Mr. Simmons

I am writing to you as a concerned citizen of Huntington Beach regarding the north side of pier parking structure. I request
1 that it be designated as a park for viewing the ocean and that it be as least one foot below Pacific Coast Highway.

This is for the record.

Very truly yours,

Nancy J. Zeleznikar

Nancy J. Zeleznikar

RESPONSE TO COMMENTS BY NANCY J. ZELEZNIKAR
20771 AQUATIC LANE, HUNTINGTON BEACH, CA 92646
RECEIVED SEPTEMBER 8, 1987

1. This comment has been received. Ultimate design and use of the top of the proposed parking structure will be determined at a later date by the City of Huntington Beach and various state agencies.

cc: PLANNING Com
HESS
O'HACA

August 27, 1987

Mike Adams
Planning Department
C/O City Clerk (for the record)
2000 Main St.
Huntington Beach, CA 92648

I am writing in reference to the North Of The Pier Resource Inventory and General Plan (Development Plan). Any plans to use this area for development must be discontinued. Such plans would destroy one of the best California coastlines in addition to blocking the coastal view from Pacific Coast Highway. Furthermore, any development on the beach side of Pacific Coast Highway would not be in the best interests of either the general public or of Huntington Beach citizens.

I urge you to consider that the above referenced area be permanently dedicated to the beachgoing public.

Thank you for your attention to this matter.

Sincerely,

Mark Gist
11884 Mayflower Cir.
Fountain Valley CA 92708

RESPONSE TO COMMENTS BY MARK GIST

11884 MAYFLOWER CIRCLE, FOUNTAIN VALLEY, CA 92708

RECEIVED SEPTEMBER 8, 1987

1. This comment has been received as an opinion of which no response is necessary.

8/28 7-Planning
1-La Calle
1-City Admin

Jo-Anne Jarvis
21132 Greenboro Ln.
Huntington Beach, Ca. 92646
(714) 960-2191
8-27-87

Hal Simmons
c/o City Clerk
2000 Main St.
Huntington Beach, Ca. 92648

Dear Mr. Simmons:

1 I would like to take the opportunity to make my feelings known regarding any construction on the norht side of the Huntington Beach pier. I feel strongly that every effort should be made to preserve the ocean views in this area, and that the top of any structure should be at least one foot below Pacific Coast Highway, and that the top of such structure (should it be built) should be used as a passive public park in keeping with the seaside resort aura.

There should not be any consideration given to the idea of using this area for a parking lot.

Sincerely,

Jo-Anne Jarvis

RESPONSE TO COMMENTS BY JO-ANNE JARVIS
21132 GREENBORO LANE, HUNTINGTON BEACH, CA 92646
RECEIVED SEPTEMBER 8, 1987

1. This comment has been received. Ultimate design and use of the top of the proposed parking structure will be determined at a later date by the City of Huntington Beach and various state agencies.

RECEIVED
AUG 20 1987
REDEVELOPMENT

8/19 1-CC 7-Cou 7-PC 1-HNS 1-Lake

August 17, 1987

SUBJECT: NORTH-OF-THE-PIER-RESOURCE INVENTORY & GENERAL PLAN (DEVELOPMENT PLAN)

FROM: APRIL L. VAN WIE
918 WALNUT AVE.
HUNTINGTON BEACH, CAL. 92648

RECEIVED
CITY CLERK
CITY OF
HUNTINGTON BEACH, CALIF.
AUG 18 1 10 PM '87

IN REGUARDS TO YOUR GENERAL PLAN FOR THE NORTH-OF-THE-PIER AREA. I AM REQUESTING YOU TO INCLUDE THE FOLLOWING ORDINANCE IN THE MINUTES.

1 ORDINANCE NO. 2907 SECTION #13.08.070 ADOPTED JULY 27, 1987, DOGS AND OTHER ANIMALS ALLOWED ON THE BEACH NORTH OF GOLDENWEST STREET, DOGS CONSTRAINED BY A LEASH NO LONGER THAN SIX (6) FEET IN LENGTH ARE PERMITTED.

PLEASE MAKE SURE TO INCLUDE THIS ORDINANCE IN YOUR NORTH-OF-THE-PIER GENERAL PLAN.

8/24 Mike
Pls include
Thanks

THANK YOU,
April L. Van Wie
8-26-1987

RESPONSE TO COMMENTS BY APRIL L. VAN WIE
818 WALNUT AVENUE, HUNTINGTON BEACH, CA 92648
RECEIVED SEPTEMBER 8, 1987

1. It is the intent of the general plan to incorporate and include all previously established municipal ordinances by reference.

August 27, 1987

Mike Adams
Planning Department
C/O City Clerk (for the record)
2000 Main St.
Huntington Beach, CA 92648

I am writing in reference to the North Of The Pier Resource Inventory and General Plan (Development Plan). Any plans to use this area for development must be discontinued. Such plans would destroy one of the best California coastlines in addition to blocking the coastal view from Pacific Coast Highway. Furthermore, any development on the beach side of Pacific Coast Highway would not be in the best interests of either the general public or of Huntington Beach citizens.

I urge you to consider that the above referenced area be permanently dedicated to the beachgoing public.

Thank you for your attention to this matter.

Sincerely,

Robert Coffman

Robert Coffman
201 Lake St. # 5
Huntington Beach, CA 92648

RESPONSE TO COMMENTS BY ROBERT COFFMAN
201 LAKE STREET #5, HUNTINGTON BEACH, CA 92648
RECEIVED SEPTEMBER 8, 1987

1. This comment has been received. Ultimate design and use of the top of the proposed parking structure will be determined at a later date by the City of Huntington Beach and various state agencies.

FRANK CHAMBERS & MINNIE CHAMBERS
21462 PACIFIC COAST HGWY. 97
HUNTINGTON BEACH CA. 92648

Hal Simmons
Planning dept.
C/O City clerk
(for the record)
2600 Main st.
Huntington Beach Ca. 92648

subject:North of pier resource and inventory and general development plan

GENTLEMEN

As concerned citizens of the city of Huntington Beach We would like to present the following conditions for inclusion in the plan for the "North of the pier parking structure"

The top level of the structure shal be dedicated forever as a park. the structure shall be designed so that the top surface will be at least one foot below the level of pacific coast highway and will not obstruct the view of the ocean from the sidewalk on Pacific Coast Highway

Very Truly Yours
Frank Chambers

Frank Chambers

Minnie Chambers

Minnie & Chambers

RESPONSE TO COMMENTS BY FRANK AND MINNIE CHAMBERS
21462 PACIFIC COAST HIGHWAY #97, HUNTINGTON BEACH, CA 92648
RECEIVED SEPTEMBER 8, 1987

1. This comment has been received. Ultimate design and use of the top of the proposed parking structure will be determined at a later date by the City of Huntington Beach and various state agencies.

327 SEVENTH STREET
HUNTINGTON BEACH, CA. 92648

August 25, 1987

Mr. Hal Simmons
Planning Department, City of Huntington Beach
C/O City Clerk FOR THE RECORD
2600 Main Street
Huntington Beach,Ca. 92648

Re: Land adjacent to, and on the north side of the pier

Dear Mr. Simmons,

For the record, I remain totally against any development on the ocean side of Pacific Coast Highway. However, since plans are in the making for a parking structure on the beach, I am writing in favor, of two conditions:

1. The entire top of the parking structure should be dedicated, forever, as a park.

1

2. The top of said structure should be at least one foot below Pacific Coast Highway, so as not to obstruct the view.

The quality of life has declined greatly since I moved here 27 years ago. The good things I moved to Huntington Beach for no longer exist.

Let's start thinking about "optimum", rather than "maximum" development. Let's start thinking about the families, and the concerned citizens who live here, rather than how to attract more tourists, and where they park.

Sincerely,

Roger Anderson

Roger Anderson

RESPONSE TO COMMENTS BY ROGER ANDERSON
327 7TH STREET, HUNTINGTON BEACH, CA 92648
RECEIVED SEPTEMBER 8, 1987

1. This comment has been received. Ultimate design and use of the top of the proposed parking structure will be determined at a later date by the City of Huntington Beach and various state agencies.

City of Huntington Beach
Development Services Dept.

August 12, 1987

Subject: State Beach General Plan
Area II, 9th St. to Goldenwest St.

We wholeheartedly support the original plan the city proposed for this area. It is changes to this plan we object to.

We heard Ms. Ortega from H.B. Tomorrow, suggest a 2 level parking structure on the N.W. corner of 17th & PCH. As the owner and resident of a 4-plex since 1972, next to that piece of property, we are adamantly opposed to this idea. We already suffer from traffic noise and congestion. A 2-level parking structure would be intolerable and would severely hurt our property values. Other properties in the vicinity would suffer the same fate. Two new houses, just 100 feet away have just sold for $310,000. The structure would spell disaster for the new owners.

A parking structure 30 feet from our property would increase by several times, the problems we already suffer from beach visitors. If you haven't lived by P.C.H., these are the things that happen:

1. We pick up trash daily; bottles, cans, & fast food wrappers.
2. People urinate on our fence and in full view of the windows.
3. All night beach goers, that often stay to drink & party at their cars, parked by houses and apartments.

We claim that a parking structure is incompatible in the immediate vicinity of a private residence.

Other Reasons:

A. The original parking plan puts visitors where they want to be (beachside) and evenly distributed down the length. Whereas, a parking structure at 17th, would put visitors in one bunch, causing long walks across PCH, then down the beach as much as 8 blocks.

B. People are killed every year crossing PCH. The bike path crossing does not pose as much danger as PCH crossing. Also, a bike path could go oceanside of parking, as it does along the rest of the beach.

C. The cost of a parking structure would be an unnecessary burden on the city.

Please stay with the original plan for this beach area for the sake of the visitors as well as the residents.

Sincerely,

Archie Kessell
Jo Anne Kessell
115 - 17th Street

RESPONSE TO COMMENTS BY ARCHIE AND JOANNE KESSELL
115 17TH STREET, HUNTINGTON BEACH, CA 92648
RECEIVED SEPTEMBER 8, 1987

1. These comments essentially support the proposed general plan and do not warrant a response.

17422 Lido Lane
Huntington Beach, CA 92647
August 28, 1987

Mr. Hal Simmons
Planning Department
Huntington Beach City Hall
2600 Main Street
Huntington Beach, CA 92648

Dear Mr. Simmons,

Having lived in Huntington Beach for nineteen years, and been active with many organizations interested in city planning during that time, I am writing to express my concern for the development proposed north of the Huntington Beach Pier.

During the summer weekends there is certainly a need for additional parking near the beach for beachgoers, and the multi-level parking structure proposed north of the pier would help meet that need. But over 80 percent of the year there is no such need. A parking garage that conceals the cars is certainly advantageous to the exposed one-level parking lots that presently exist, and is more efficient use of surface area. However, I urge that the design of that parking structure be required to (1) be one meter or more below the grade level of Pacific Coast Highway, and (2) that the top of the structure be retained for all the future as open space for the public, that no buildings of any sort be permitted on top.

This would allow all to have the visual and physical access to enjoy the oceanfront --those driving along Pacific Coast Highway, those reaching the coast from the Main Street corridor, and those wanting to picnic, stroll, or sit and enjoy our special piece of nature without getting into the sand. This would provide a good location for a large number of people to view pier-side activities that occasionally occur. There will be quite enough visual obstruction of the ocean, and enough commercialization with the shops of various sorts, restaurants, restrooms, and more parking, etc., in the new construction approved south of the pier.

This visible, usable, open beach is such a unique resource here in Southern California, that IT MUST NOT BE TAKEN AWAY FROM ALL THE PEOPLE WHO ENJOY IT--those of us fortunate enough to live here, and the thousands who visit.

On a slightly different issue--the building of new concession stands along the beach between the pier and Goldenwest appears to have reasonable controls in the size, separation, and location of the structures to meet the needs of the beachgoers, to increase the use of the waterfront north of the pier and the apartments, and yet not detract significantly from the recreational uses of the sand beach.

Please continue to consider the interests and needs of the majority of the people. We all want to continue enjoying our 8½ mile open stretch of the Pacific Ocean and its prime sandy beach.

Sincerely,

Margaret A. Carlberg

Margaret A. Carlberg

cc: Grace Winchell, City Council
Vic Leipzig, Planning Commission
Betty Kennedy, Community Services Comm.
Dean Albright, Environmental Board

RESPONSE TO COMMENTS BY MARGARET A. CARLBERG
17422 LIDO LANE, HUNTINGTON BEACH, CA 92647
RECEIVED SEPTEMBER 8, 1987

1. This comment has been received. Ultimate design and use of the top of the proposed parking structure will be determined at a later date by the City of Huntington Beach and various state agencies.

2. Access to the beach area is a guiding policy within the City's General Plan, Local Coastal Plan, Downtown Specific Plan and the subject general plan.

3. Comment received with no response necessary.

RECEIVED

cc: C. O'HAR

September 2, 1987

Mike Adams
Planning Department
C/O City Clerk (for the record)
2000 Main St.
Huntington Beach, CA 92648

I am writing in reference to the North Of The Pier Resource Inventory and General Plan (Development Plan). Any plans to use this area for development must be discontinued. Such plans would destroy one of the best California coastlines in addition to blocking the coastal view from Pacific Coast Highway. Furthermore, any development on the beach side of Pacific Coast Highway would not be in the best interests of either the general public or of Huntington Beach citizens.

I urge you to consider that the above referenced area be permanently dedicated to the beachgoing public.

Thank you for your attention to this matter.

Sincerely,

Troy D. Manor

Troy D. Manor
16881 Green St. # 4
Huntington Beach CA 92649

LEE T. CARLETON
REGISTERED PROFESSIONAL ENGINEER

8132 WILDWOOD CIRCLE
HUNTINGTON BEACH, CALIFORNIA 92646

(714) 536-7856

August 26, 1987

Mr. Hal Simmons
Planning Department
c/o City Clerk, for the record
2600 Main Street
Huntington Beach, CA 92648

Ref.: North of Pier Resource and Inventory on General Development Plan

Dear Sir:

We are long-time residents here. We are certain that our most precious, unique resource is our public beach. We want our elected officials to share this certain

Beach area can be sacrificed in many ways. Some new development proposals threaten it by limiting access open views and ease of movement around the beach.

We strongly support the following suggestions for
1 the north-side parking structure: ① construction of the top below the level of Pacific Coast Highway to preserve an unobstructed view of the ocean, and ② permanent dedication of the property as a park.

Your cooperation would be appreciated.

Yours very truly,

RESPONSE TO COMMENTS BY LEE T. CARLTON

8132 WILDWOOD CIRCLE, HUNTINGTON BEACH, CA 92646

RECEIVED SEPTEMBER 8, 1987

1. This comment has been received. Ultimate design and use of the top of the proposed parking structure will be determined at a later date by the City of Huntington Beach and various state agencies.

OF CALIFORNIA—THE RESOURCES AGENCY

PARTMENT OF PARKS AND RECREATION
BOX 2390
AMENTO 95811
(916) 445-2358

HUNTINGTON BEACH
DEVELOPMENT SERVICES

SEP 2 . 1987

P.O. Box 190
Huntington Beach, CA 92648

SEP 1 8 1987

Mr. Hal Simmons, Associate Planner
Department of Community Development
City of Huntington Beach
Huntington Beach, CA 92648

Dear Mr. Simmons:

The Department of Parks and Recreation has reviewed the amendment. Our comments follow:

1 1. The document should be clearly titled as a General Plan Amendment, as identified in the Operating Agreement.

2 2. The restaurant site is not in accord with Exhibit "D" of the agreement.

3 3. The Environmental Impact Element does not adequately address the concerns identified in this Department's response to the Notice of Preparation.

4 4. The parking structure as depicted in the "Pierside" development may not allow public views of the beach and ocean from the Pacific Coast Highway.

5 5. The property was acquired with the assistance of the Land and Water Conservation Fund. The conditions of this purchase may not permit the use of these lands for private commercial parking. The amount of parking appears to be in excess of that reasonably needed for beach use.

6 6. The project includes a parking structure and other parking areas on the seaward side of Pacific Coast Highway. The document does not include any background material on the risks to these developments from ocean action or any history of storm damage or wave run-up.

More specific comments on the "Resource Inventory" and "Resource Element" follow:

Resource Inventory

7 On page 16, the inclusion of Public Resources Code Sections on State Parks and State Recreation Areas is not relevant to the unit. The appropriate PRC Section is 5019.56, for both the general discussion of State Recreation Units and the discussion under (c) State Beaches.

8 pg. I-1. References to project site formerly being Bolsa Chica State Beach and change in responsibility (operating agreement) constituting a reclassification are incorrect.

9 pg. H-7 Flood Prone Areas. Information on flooding frequency of parking lot by storm waves is needed.

Geology Section. We have questions about the validity of information, evaluation, and recommendations provided in this section.

10 pg. 6-13 Subsidence. Discussion of past and potential future subsidence of project area needs to be expanded. Amount of subsidence mentioned in text does not appear to correlate with Figure G-6.

11 pg. 6-20 Coastal Erosion. The material provided under this subheading is seriously lacking in information. For example, no information is provided on present rate of bluff erosion, measures already taken to minimize bluff retreat and their effectiveness, beach sand depletion, etc. Coastal erosion information and analysis is the most crucial resource issue that needs to be addressed in coastal units.

12 pg. 5-5 Sand Supply. Information provided is inadequate. No assessment is made of historic beach sand resource vs. present and future. Only annual regional and delivery data from three major rivers is provided.

Resource Element

13 pg. 1 The purpose of a Resource Element is not just "to preserve, enhance, and encourage the recreation use of the unit". A more balanced statement is needed.

14 pgs. 1 & 15 The text incorrectly refers to the project site as formerly Bolsa Chica State Beach and states that the operating agreement between the State and City "constitutes" a reclassification. The project site is still part of Bolsa Chica State Beach and has not been reclassified. It appears that the project proponent desires to split off and rename the project area from Bolsa Chica State Beach. If this is the proposal, it should be clearly stated.

15 pgs. 2, 23, 24 & 25 Text of the first three pages, and the map on page 25 (Figure 3) all imply that 106 condominium units are located on State land. This should be checked.

16 pg. 5 Replace first sentence with the following: "The purpose of this Resource Element is to establish long-range goals and policies necessary to protect and perpetuate the natural, cultural, and recreational resource values for which the unit was established."

17 pg. 8 Information on constraints related to flooding by wave and tidal action and erosion needs to be greatly expanded.

18 pgs. 10-13 The ethnographic and historic background section appears to be well done, although it is fairly long considering the absence of physical cultural resources or significant historical activity in the amended area.

pgs. 16, 17 Reference to the State Park classification is not pertinent and should be deleted.

The proposed Declaration of Purpose should be deleted and replaced with the following:

19

> The purpose of Bolsa Chica State Beach is to make available to the people, for their benefit and enjoyment, the scenic, natural, cultural, and recreational resources of the ocean beach and related uplands.
>
> Management of the unit shall be to preserve and protect public opportunities for ocean beach-oriented recreation in a high-quality environment.

If this project area is split off from Bolsa Chica State Beach, the new name adopted by the State Park and Recreation Commission should be substituted.

pg. 17 Zone of Primary Interest. Replace paragraph with the following:

20

> A zone of primary interest is that area outside the unit in which land use and development changes could adversely impact the resources of the unit. This area includes adjacent City of Huntington Beach, the Pacific Coast Highway, and offshore areas. Of particular concern would be any adjacent development that would impact parking in the unit for State Beach users.

Reference to Resource Management Plan (PRC Section 5002.2) is incorrect.

Topography Hazard Mitigation. This policy should be relocated to the Operations Element.

21 pg. 18 Geologic Hazard Mitigation. Policy should be relocated to Operations Element.

Replace section on Monitoring of Geologic Hazard with the following:

SEP 1 8 1987

Monitoring Erosion and Sand Loss

Beach erosion and seacliff retreat have been recognized as serious threats to facilities and use of coastal units of the State Park System. Better baseline information on erosion rates and coastal geological hazards is needed to plan for appropriate land use, resource management, and visitor safety.

22

Policy: A monitoring program shall be established to document: 1) block falls on and adjacent to beach, 2) landslides, 3) gully development, 4) pavement cracks or building cracks from differential settlement or subsurface movements, and 5) beach elevation and width. The program should include the comparison of historical and recent aerial photos, ground photos with explanations (date, time, tide status), and installation of permanent monuments, if necessary.

Add the following:

Coastal Erosion

Following several years of significant storm damage in many coastal State Park System units, the Department adopted a policy for coastal erosion on October 24, 1984. The intent of the policy is to avoid construction of new permanent facilities in areas subject to coastal erosion, unless the risk of loss is clearly offset by the need for the facility, and to promote the use of expendable or movable facilities in erosion prone areas. The policy reads as follows:

23

The Department of Parks and Recreation shall avoid construction of new structures and coastal facilities in areas subject to ocean wave erosion, seacliff retreat, and unstable cliffs, unless specific determinations have been made that the risk of loss of the facility is clearly offset by the investment and need for the facility. Measures shall be taken to minimize human induced erosion by reducing: concentrated surface runoff from use areas, elevated groundwater levels from irrigation and urbanization, and surface disturbance of blufftop soils. In recognition of California's actively eroding coastline, new structures and facilities located in areas known to be subject to ocean wave erosion, seacliff retreat, or unstable bluffs shall be expendable or movable. Structural protection and reprotection of developments shall be allowed only when the cost of protection is commensurate with the value (physical and intrinsic) of the development to be protected, and when it can be shown that the protection will not negatively affect the beach or the near-shore environment.

SEP 1 8 1987

pg. 19 Delete General Erosion Control section.

Add the following:

Bluff Setbacks

That seacliff retreat is an ongoing process should be taken into consideration when designing and placing facilities near bluff edges. To protect investments in facilities, minimize the need for coastline protective devices, and assure public safety, it is a sound principle to establish setback zones--both "zones of exclusion", where facility development is precluded, and "zones of demonstration", where facility development is allowable if stability and geologic suitability can be demonstrated.

24

Policy: A zone of exclusion shall be established to include the base, face, and top of all bluffs extending inland to a plane formed by a 45-degree angle from the horizontal at the base of the bluff. No new structures shall be constructed within this zone unless they are either movable or expendable. Existing facilities may remain in use subject to regular inspections. A zone of demonstration shall be established in the unit to extend inland from the zone of exclusion to the intersection of the ground surface with a plane inclined 20 degrees from the horizontal from the toe to the bluff.

Add the following:

Shoreline Protection Devices

Although structural protection measures are not consistent with the general objectives for resource management within the State Park System, in certain circumstances, when the public facility is of greater necessity and importance than the natural resources which may be negatively affected, structural protective measures may be appropriate.

25

Policy: Structural protection measures shall be undertaken only if non-structural measures (i.e., relocation of facility, setback, redesign, or beach replenishment) are not feasible. If a protective structure is constructed (i.e., riprap at the base of the seawall or construction of a new seawall), the structure shall not:

1. Significantly reduce or restrict beach access;
2. Adversely affect shoreline processes and sand supply;
3. Significantly increase erosion on adjacent properties;

SEP 1 8 1987

4. Be placed further than necessary from the development requiring protection; or
5. Create a significant visual intrusion.

26 pg. 20 Esthetic Resources. Add after first sentence in policy, All new developments shall be designed to maintain existing scenic views of ocean and shoreline from the Pacific Coast Highway.

27 Oil wells are mentioned in sections on ownership, history, and esthetic resources, but are not mentioned in the one policy on esthetic resources.

28 pg. 21 In the third paragraph, replace "state park" with "State Beach".

29 The first sentence under Cultural Resources in the policy sections is difficult to understand: "The unit is within a large geographical entity that does not contain significant cultural/historical resources." Does this again infer, as mentioned above, a belief that the project lands are to be separated from Bolsa Chica State Beach and separately classified?

Land Use and Facilities Element

30 Area 1, comprised of low bluff and wide gentle sloped beach, is the only section of the shoreline within the City limit that motorists on PCH may have a view down to the beach and the ocean shoreline. The proposed parking structure, extending 200 feet from the edge of PCH and at the same level with PCH, blocks from view everything that is below the highest edge of the structure, including the entire view of beach and ocean as it is now visible.

31 pg. 26 Land Use and Facilities Element did not mention the capacities of the proposed parking structure and commercial (food) pad. This gives no basis for the reviewers to make comment.

pg. 26 Area I, Add to the first sentence ...existing parking lot site, consistent with Esthetic Resource Policy.

32 While providing for "active (volleyball, basketball, etc.) recreation" is appropriate in a local park, it is not appropriate in a State Beach.

33 Combine second and third items as follows. Provide for concession area as part of parking structure to replace, in kind, existing concession stand for State Beach area.

34 Add as last item, Consider surf museum after the Department of Parks and Recreation makes regional or statewide assessment of need and appropriateness of location.

If a surfing museum is proposed, then such items as thematic approach, appropriate locations, who is going to pay for it (the Department has a policy of not funding specific industry museums), should be detailed in the Interpretive Element.

The interpretive themes do not cover several important topics such as:

35

a. Cultural History - The flow of history from Native American to Hispanic to American period and how Bolsa Chica became a unit of the State Park System. The story of oil discovery in the region and early coastal recreation is similarly overlooked.

b. Natural History - Topics of interest may include how a beach is created, sand movement and replenishment, ocean tides and currents, shore birds, etc.

pg. 27 Area II. Add to the last sentence, "Provide for concessions directly related to beach use activities."

Unresolved Planning/Environmental Issues. Add after first paragraph:

36

In Area I there is a potential parking conflict between State Beach users and others visiting adjacent areas. A parking plan that maximizes the parking opportunities for beach users will need to be approved by the Department prior to construction of the parking facility at the State Beach.

Change last line to read:

It is necessary to monitor this erosion in order to determine proper siting, consistent with bluff setback and shoreline erosion policies, for future improvements.

pg. 37 Paragraph 3, under Traffic/Circulation of EIR section (parking structure), approximately 500 cars is misleading because it does not conform to the actual count of the drawings provided by the City of Huntington Beach which propose 1,400 cars.

37

The "State Beach General Plan" as proposed by the City of Huntington Beach requires serious consideration concerning the amount of parking provided.

The beach is, of course, the natural resource to be accessed by the public, so it follows that the beach's capacity for accommodating people should be the basis for the amount of parking provided.

The typical maximum standard used by this Department for recreational carrying capacity on Southern California beaches is 100 sf/person. Most of our beaches never reach this density. Higher density may adversely affect public safety because the use of rescue and patrol vehicles becomes restrictive.

The 100 sf/person standard occurs within the first 100 feet from the water. Beach user density further than 100 feet from the water is drastically reduced. Such areas are either unused except for walking across to get near the water or used for volleyball, baseball, and other informal sports and games. This lesser density will probably average less than 1,000 sf per person.

The "Area I" beach is 900 feet in length and 300 feet wide. The beach recreation capacity would be 90,000 sf at 100 sf/person plus 180,000 sf at 1,000 sf/person or 900 + 180 or 1,080 people. 1,080 people at three people per car would require 360 cars if everyone who came to the beach came in a car and parked at the beach. To encourage bus, bicycle, automobile drop-off, and walking transportation, somewhat fewer cars would be accommodated by good planning.

A three level parking structure along the 900 lineal feet of "Area I" beach will park 1,400 vehicles or 4,200 people at 3 people per car. This is nearly four times the capacity of the maximum standard of the carrying capacity for State Beaches in Southern California.

Sincerely,

W. Les McCargo

Les McCargo
Chief Deputy Director

Y-3217L

cc: Mr. Henry R. Agonia
Mr. Jack V. Harrison
Mr. Richard G. Rayburn
Mr. Kenneth L. Mitchell
Ms. Jackie Deuschle
Mr. Keith L. Demetrak
Mr. Robert D. Cates
Mr. Roberto P. Vellanoweth
Mr. Ross T. Henry
Mr. Bruce Kranz
Mr. Thomas Miller, District Superintendent
Orange Coast District

Mr. Ronald McCullough
Regional Director
Southern Region

RESPONSE TO COMMENTS BY LES MCCARGO, CHIEF DEPUTY DIRECTOR
DEPARTMENT OF PARKS AND RECREATION
RECEIVED SEPTEMBER 23, 1987

1. This comment is accepted and the final document will be amended as noted.

2. The General Plan proposes the location and conceptual design of uses and structures, respectively. Final design and elevations of any structures shall be determined by the City of Huntington Beach, various state agencies and through public participation.

3. This is a general comment and no response is necessary.

4. Refer to Response #2

5. There is no intent of designating any proposed parking for "private commercial parking." All proposed parking is intended to replace on-street parking that will be removed when the widening project occurs. This is primarily for beach traffic.

6. No significant "storm damage or wave run up" has been recorded for similar structure in the vicinity. The adjacent residential structures, which extended closer to the mean high tide mark than the proposed parking structure has not suffer any significant ocean storm damage with the exception of periodic flooding within the subterreanean parking area. The municipal pier has sustained damage over the past 70 years from wave action. The Federal Emergency Management Agency (FEMA) has established that the subject site is within Zone V - areas of 100-year coastal flood with velocity (wave action); base flood elevations flood hazard factors not determined. Risk will be reduced through con-

struction pursuant to FEMA's criteria, City of Huntington Beach Building Code and the County of Orange Coastal Floodplain Management Guidelines.

7. Comment accepted and final document will incorporate the pertinent sections.

8. Comment accepted and final document will incorporate the pertinent sections.

9. Refer to Response # 6. This information has been incorporated into The Resource Element.

10. The Guidelines for Resource Documentation (1984) published by the Department of Parks and Recreation state that the Geology Section "...should, at a minimum, meet the requirements of the Board of Registration for Geologists and Geophysicists." There is no specified requirement for a registered geologist. All authors' resumes are on file for review.

11. Figure G-6 is a general overview of the area while the text focuses on the specific unit. There is no conflict between the figure and the text.

12. At the time of the preparation of the resource documentation, no current study existed that adequately described bluff erosion and sand depletion as these environmental issues pertain to the specific as referred to in Comment No. 22. The existing program of beach replenishment (Anderson Street) was noted in the General Plan Amendment. Such a specific study would require approximately 18 to 24 months to complete. The U.S. COE is currently preparing a specific study for the Dana Point area. However, the COE will not initiate a similar study for the Huntington Beach area for approximately two years.

It has been recommended to the City of Huntington Beach that a coastal erosion analysis, specifically addressing the bluff area, be prepared prior to final plan development for the proposed bike trail and parking areas.

13. Preservation, enhancement and accessibility to an existing resource is the primary intent of the general plan amendment. The reciprocal would be change in use, negligence and limited access.

14. Refer to Response # 1.

15. Futher investigation reveals that these residential units are actually a stock cooperative with ownership in common.

16. Comment accepted and will be incorporated into final document.

17. Refer to Response # 6.

18. No response is warranted.

19. Comment accepted and will be incorporated into the final document.

20. Comment accepted and will be incorporated into the final document.

21. Comment accepted and will be incorporated into the final document.

22. Comments accepted and will be incorporated into the final document.

23. These are general comments that can be incorporated into the final document.

24. These are general comments that can be incorporated into the final document.

25. These are general comments that can be incorporated into the final document.

26. This comment is establishing a broad policy that which the City of Huntington Beach has yet to make a final determination. Therefore, it is not appropriate to incorporate the comment into the General Plan at this time.

27. The existing oil wells will be reduced or removed in the next ten to fifteen years. There is a current City ordinance which requires screening for oil wells. The Resource Inventory (p. E-1) does note that the oil wells are negative esthetics features.

28. Comment accepted and will be incorporated into the final document.

29. The paragraph should read as follows:

    The unit is within a larger geographical entity which contains significant cultural historical resources that have been documented in other studies. However, there are no known archaeological or paleontological sites within the unit.

30. Please refer to Response # 26.

31. The General Plan Amendment addressed conceptual land uses in proposed locations. The final design and capacity of any structure is not known at this time. A significant amount of public comment and input has been received regarding this

area and the proposed uses. This participation process has assisted in forming preliminary parameters that will eventually lead to construction drawings. At that time, further environmental review may be warranted.

32. Comment accepted and will be incorporated into the final document.

33. Comment accepted and will be incorporated into final document.

34. This was a concept that was initiated during the public participation that was originated by an interest group. A "regional assessment of need and appropriateness of location" will occur at a later date and be submitted to the State Department of Parks and Recreation for review.

35. This portion of the document has been amended as noted.

36. Comments accepted and have been incorporated into final document.

37. This portion of the document has been expanded to include "worst case" scenarios. These parking generation figures are accepted as valid. It should be noted that the Coastal Commission has encouraged the replacement of the on-street Pacific Coast Highway (PCH) parking at a one-to-one basis on the ocean side of PCH. Additionally, limiting the amount of parking in this area will not have a correlating reduction on the amount of beach destination traffic. Other parking sites, could be identified. However, such siting may increase pedestrian/vehicular conflict (PCH) and decrease traffic movement efficiency by creating additional destination points adjacent to PCH.

HUNTINGTON BEACH
DEVELOPMENT SERVICES

15271 Nottingham Lane
Huntington Beach, Ca. 92647

Home Telephone (714) 897-3994
Business Telephone (213) 431-7040

P.O. Box
Huntington Beach, CA 92648

September 21, 1987

RE: Bolsa Chica General Plan and Environmental Impact Element of the State Beach Planning Unit dated August 1987

1. The Environmental Impact Statement by its text incorporates a number of City documents by reference but makes no statement on Page 33 as to the consistancy of said documents. Discussion of inconsistancies should be included as indicated by valid testimony received at the Planning Commission hearing on September 15th. The ability of the public to comment on this and referenced documents has been seriously prejudiced by its having been transmitted to the State agencies prior to local hearings and approvals. It has been further prejudiced by the Huntington Beach Planning Commission holding and closing their hearing and taking actions on same prior to the closing of the comment period. 1

City staff has raised the defense that a pre-hearing workshop was held earlier. The fact is that only a four page outine was available for comment and staff has not provided any listing of notification of interested parties.

2. The page 35 reference back to page 23 for Project Description and information on the surrounding area leaves much to the imagination. It could be much more specific. Information should be included summarizing what the City plans inclcude for future uses downcoast of and incoast of the unit. Namely the Pierside Village and the County's Bolsa Chica Land Use Plan should be summaried. Mention of the Bolsa Chica Linear Park, approved in concept in 1977, to link the Bolsa Chica State Beach with the Central City Park should be included. The planned visitor serving hotels and motels included in the surrounding commercial uses should be summarized. 2

[Also on page 23 there is mention of State ownership of beach condo property which I believe to be inaccurate.]

The page 27 reference for provision of concessions in Area II, (now modified by the Planning Commission) and any like it should be more specific as to whether these are fast food, restaurant, bicycle rental or unbrella operations. The lack of specificity is apparent here and throughout the document. 3 4

3. Page 35 references back to various other sections of the general plan leaves the reader without a clear picture from the provided 2 paragraph description of the Environmental setting. Trying to critique and suggest improvements is made most difficult. Its like trying to hit a moving target. At the minimum this paragraph should acknowledge the proximity of the beach unit to the State

5 Ecological Reserve and the high level of use of same by migratory water fowl and shorebirds which feed on the edge of the shoreline within the state beach unit.

6 4. The section on Noise (page 36) should acknowledge that Area III is impacted by oil well re-drilling operations and helicopter traffic in and out of the helipad located just inland.

7 5. The traffic/Circulation section fails to acknowledge the proposal to replace beach recreational parking places (approx. 200) being displaced by the Pierside I project just downcoast on City property in the parking structure north of the pier when they have an adjacent City owned parcel immediately downcoast of Pierside that could be utilized for this purpose.

8 No mitigation is proposed to accomplish lifting the traffic/parking caused runoff from the parking structure(s) and or parking strips on the lower road. These being below PCH grade level will frow out onto the beach unless proper mitigation is specifically demanded. (See pg 34 inadequate language and absence of language on page 37.

9 6. The page 40 discussion of Plans and Zoning begs the issue in stating that the proposed State General Plan for the beach is consistant with the Huntington Beach Specific Plan for the area. The real question should be whether the proposed plan meets the statewide purposes appropriate to a State owned property dedicated to public use.

10 7. Page 41 section on Commercialization is vague. It fails to describe the intended level and nature of proposed commercialism. Are we talking high priced restaurants in the future or are we talking bicycle rentals, sailboards, etc. The paragraph is a contradiction. First it says the area could be used for higher commerical intensity, then it cautions against same.

Page 41 (Short-Term....) makes the statement that the general plan is essentially an extention of the existing uses. That statement is inaccurate as to Area I General Plan facilities (as proposed before modification be the HB Planning Commission).

11 Page 41 Growth Inducing Impacts.... section is inadequate without stating the intensity of the changes (upzoning) in the residential community that will come to be under the HB Downtown Specific Plan. While the General Plan (as modified) will not have growth inducing impacts, plans for the surrounding growth intensifications should be discussed. (i.e. planned hotels & motels

Suggestions for additons, corrections and deletions from other parts of the General Plan as such has been incorporated by reference.

A Plant Life Pg9 After No rare and endangered plants have been found in the unit. Add...the remnant native species that exist help support migrating shorebirds.

12 B Add an entire section in Animal Life to describe the shore birds that move back and forth between the Bolsa Chica Wetlands and the shoreline for dawn and dusk feeding. The Bolsa Chica Wetlands host daily populations of more than 10,000 migrating & over wintering birds each year.

C. Standing Structures - The municipal pier history is inadequate without discussion of the 1983 damage and repairs financed in part by the Coastal Conservancy. There should be acknowledgment of its historical registration and the need for extensive repair o the section at landside since such is yet to be financed.

D. Top paragraph on page 11, line two should be corrected to cog stones instead of so-called donut stones.

NOTE: The General Plan has three pages devoted to Indian history and almost no copy describing present day, and future development as allowed in the Specific Plan and Local Coastal Plan (See page 23 one paragraph description)

E. Recreational Resources, cont. on page 15 should acknowledge that existing on-street parking will be lost to roadway widening in paragraph 3.

F. Resourse Policy Formation section on page 15 discusses reclassification of the unit without making it clear what it is being reclassified from and what it is being reclassified to become. Clarification is needed.

As discussed and modified by the HB Planning Commission a preserve concept should be considered for a small protion of Area III.

E. The Policy Section(s) from page 17 forward should have a Natural Resources section related to protection of shore birds and waterfowl.

This section includes only 12 policy statements for a total of 60 lines. On page 21 it is again unclear what State classification the unit falls under. If you can not tell what classification the unit is to be under, it is impossible to evaluate the relevancy and adequacy of the policy language.

Respectfully submitted,

Lorraine Faber

Lorraine Faber

RESPONSE TO COMMENTS BY LORRAINE FABER,
12571 NOTTINGHAM LANE, HUNTINGTON BEACH, CA 92647
RECEIVED SEPTEMBER 25, 1987

1. The Environemental Impact Element is prepared in order to satisfy, in part, the California Enviornmental Quality Act (CEQA). As authorized by Section 15150 of the CEQA Guidelines, the referenced documents are incorporated by reference because of the consistency of addressed issues. The issue of "valid testimony" as it relates to the consistency/inconsistency issue is an opinion.

2. An expanded discussion of the downtown redevelopment project has been incorporated into the document.

3. The type of concession is undetermined at this time.

4. The degree of specificity is determined by the stage of the process. The proposed General Plan Amendment is a conceptual land use document. Subsequent and detailed environment review can occur at a latter date when the conceptual uses are defined with greater accuracy.

5. The issue of mitigatory birds are well documented in the noted documents incorporated by reference.

6. Comment acknowledged and noted in final document.

7. The transfer of parking spaces from the south side of the pier to the north side of the pier is not intended nor officially acknowledged and, therefore, cannot be substantiated.

8. The final design and size of the proposed parking structure has not been determined. Therefore, the amount of storm

water runoff cannot be determined. The EIE establishes a mitigation measure for this anticipated (though not expected to be significant) impact.

9. The proposed General Plan Amendment appears to be consistent with state and local policies.

10. These sections are mandated alternatives to be noted pursuant to CEQA. The sections are not intended to advocate any form or intensity of use.

11. The section is inadequate <u>if</u> the unit involved these areas. However, it does not and open space/recreation is not a substantial growth inducing use in and of itself.

12. The remaining comments are recommendations for the documents. They are accepted and incorporated where consistent with the remainder of the proposed General Plan Amendment.

OF CALIFORNIA—THE RESOURCES AGENCY
GEORGE DEUKMEJIAN, Governor

PARTMENT OF FISH AND GAME
245 W. Broadway, Suite 350
Long Beach, CA 90802-4467
(213) 590-5113

September 15, 1987

Hal Simmons
City of Huntington Beach
2000 Main Street
Huntington Beach, CA 92648

Dear Mr. Simmons:

We have reviewed the State Beach General Plan and related documents for the project known as the State Beach-City of Huntington Beach (SCH 87070811). It is our understanding that the project site was formerly a portion of the Bolsa Chica State Beach but now the City of Huntington Beach (City) has assumed responsibility of this area from the State of California. This has resulted in reclassification of the subject site. The subject site is located between the Huntington Beach Municipal Pier and the City's northerly municipal boundaries, a distance of approximately 2.3 miles in length and encompassing approximately 100 acres. The City plans to continue its recreational improvements from Goldenwest Street to the northerly municipal boundary which is now devoid of improvements. We have the following comments for your consideration.

1 The document is inadequate in that the wildlife values were not thoroughly assessed. Wildlife usage is a function of tides, time of year, weather conditions, and human disturbance factors. With these factors in mind, the area would reveal a much larger abundance and diversity of wildlife (mostly shorebirds) when conditions are ideal.

2 The Department recognizes that development of the beach for recreational use between the pier and Bolsa Chica State Beach would be desirable for beach users. However, we recommend that the sand dune area between the south boundary of Bolsa Chica State Beach and the metered parking on the bluff along Pacific Coast Highway be developed as a natural area for native migratory and resident water-associated birds, such as the endangered California least tern which use the beach area for foraging and roosting activities. Since parking is currently limited, this stretch of beach does not receive the heavy impact of human use as compared to beaches to the north and south. Also, the steep cliffs, especially at high tide, limit further beach related recreational use.

SEP 1 3 1987

3 Regarding landscaping plans, we recommend that only native California plants be used. Invasion of exotic plants is a problem at Bolsa Chica Ecological Reserve, and non-native wildlife are also encouraged by non-native vegetation.

The bicycle path would not have a negative impact on a potential designated natural wildlife area and could provide an interpretive/educational function with proper fencing and placement of interpretive signs.

Thank you for the opportunity to review and comment on this project. Department Wildlife Management personnel are available to meet with City planning staff to discuss a potential plan design. If you have any questions, please contact Jack L. Spruill of our Environmental Services staff at (213) 590-5137.

Sincerely,

Fred Worthley
Regional Manager
Region 5

cc: ESD, Sacramento
State Clearinghouse
E. Burkett
R. Hein

RESPONSE TO COMMENTS BY FRED WORTHLEY,
CALIFORNIA STATE DEPARTMENT OF FISH AND GAME,
RECEIVED SEPTEMBER 22, 1987

1. Unless "ideal" conditions are realized, any wildlife observation and analysis would be inadequate. This was noted by the biologist performing the biology (animal and plant life) section of the resource inventory. However, the biotic characteristics of the unit as well as the surrounding area, is well documented in the referenced environmental reports specifically regarding the Bolsa Chica Wetlands EIR and the Pacific Coast Highway Widening Project EIS.

2. This is a sound recommendation; and although the referenced area is technically outside of the unit, the General Plan Amendment will reflect these comments.

3. Comment received and noted.

f California

Business, Transportation and Housing Agency

emorandum

: EXECUTIVE OFFICER
Office of Planning & Research
State Clearinghouse
1400 Tenth Street
Sacramento, CA 95814

Date : September 9, 1987

File No.: IGR
State Beach
City of Huntington
Beach SCH# 87070811

From : W. B. BALLANTINE - District 7
DEPARTMENT OF TRANSPORTATION

Subject: Project Review Comments

CALTRANS has reviewed the Resource Inventory for the State Beach General Plan. CALTRANS will not be a Responsible Agency for this project, however, the resulting increase in traffic will affect Pacific Cost Highway (State Route 1) which serves the project area.

Your inventory has identified the possible change in vehicular circulation patterns and mitigation measures which appear to be sufficient. 1

We would anticipate continued coordination between our agencies regarding land use development and relationships to our transportation system.

Thank you for the opportunity to comment. Any future correspondence should be referred to Ronald Kosinski (213) 620-3755.

W. B. BALLANTINE, Chief
Environmental Planning Branch
Transportation District 7
Clearinghouse Coordinator
For information, contact Al Fisher
(ATSS) 640-3935 or (213) 620-3935

Attachment

RECEIVED
SEP 15 1987
STATE
CLEARINGHOUSE

RESPONSE TO COMMENTS BY J.B. BALLANTINE
CALIFORNIA STATE DEPARTMENT OF TRANSPORTATION,
RECEIVED SEPTEMBER 22, 1987

These comments are general in nature and do not warrant a response.

July 31, 1987
411 6th Street
Huntington Beach
California 92648

Planning Commission
c/o Chairman, Planning Department
Huntington Beach City Hall
2000 Main Street
Huntington Beach
California 92648

Subject: Pierside Village - North Side Development

Dear Planning Commissioners,

We strongly believe Pierside Village should not be extended to the North side of the pier. The plan should remain with only parking on the North side of the pier. The widening of PCH and the development of Pierside Village will add to our already serious traffic congestion and
1 parking displacement problems. Any additional loss of parking on the North side, is a loss we can not afford.

The North side of the pier belongs to the state. The state established the purchase of this area by a bond issue for the peoples u[illegible] It should remain in tact for the people now and f[illegible] future generations. Everyone should be able to view our beautiful beach on the North side of the pier to 7th Street without any visual interruptio

Sincerely,

Mr. and Mrs. Wayne Wolfe

Huntington Beach Tomorrow
RESPONSIBLE CITIZENS FOR A BETTER HUNTINGTON BEACH AND ITS FUTURE GROWTH,
411 6TH STREET, HUNTINGTON BEACH, CA 92648

RECEIVED SEPTEMBER 23, 1987
RECEIVED
SEP 23 1987
Development Division
Directors Office
SEP 14 1987
DEPT. PARKS & RECREATION

September 10, 1987

1. This is general observation that is noted. No response is necessary.

Henry Agonia
Director, Department of Parks
and Recreation
P.O. Box 2390
Sacramento, Ca. 95811

Re: Bolsa Chica State Beach General Plan (North of the Pier)
Scheduled Hearing Date: October 9, 1987

Dear Mr. Agonia:

I am writing to you on behalf of Huntington Beach Tomorrow, a 400 member group of concerned citizens who live and work here in Huntington Beach. Our group is concerned with preserving and protecting the quality of life we are so fortunate to enjoy in Huntington Beach. Specifically, we are interested in preserving and protecting the State beaches in Huntington Beach in order that they can be enjoyed not only today but also by future generations.

1 The purpose of this letter is to request that you cancel the hearing that is scheduled to be held on October 9, 1987, in Santa Ana, California, for the purpose of reviewing the proposed Bolsa Chica State Beach General Plan. This request is being made by Huntington Beach Tomorrow due to the fact that there has been no opportunity for any type of public input for the proposed General Plan. The citizens of this community are outraged at the actions of the City in approaching your Department and requesting that the State hearing be heard at the earliest possible date. It is my understanding that this action was taken by your Department in response to a request by City Administrator Charles Thompson and Mayor Jack Kelly at a meeting held in your office on August 17, 1987. Both Mr. Thompson and Mayor Kelly are outspoken pro-growth advocates who support building on the beach. Likewise, they are supportive of grandiose redevelopment plans for the downtown area of Huntington Beach that will seriously impact the State beach which is located directly across Pacific Coast Highway from the redevelopment area. Neither Mr. Thompson nor Mayor Kelly had the permission or consent of the Huntington Beach City Council to meet with you and request the early State hearing date which is now scheduled for October 9, 1987, in

Box 865 • Huntington Beach, California 92648 • 714/536-4597

meaningful comments on the Plan. Any public comments made by a citizen at the City Council meeting to be held on September 28, 1987, would no doubt not be included in the Plan submitted to the State due to the fact that there would be insufficient processing time to include such comments, suggestions, and ideas in the Plan. Ten days is simply insufficient time for a project of this magnitude to be processed in a fair and equitable manner.

5. The Huntington Beach Environmental Board is an advisory board to the City Council and makes recommendations to the Huntington Beach Planning Commission as well as the City Council on matters that are deemed to be environmentally sensitive. The Huntington Beach Environmental Board has not had an opportunity to review or analyze the proposed Bolsa Chica State Beach General Plan. The Environmental Board is not scheduled to meet until September 10, 1987. Presumably, they will review the Plan at that time (if they can obtain a copy), but once again, there will be insufficient time for the Environmental Board to convey its written comments to the Planning Commission which will be considering the matter five days later on September 15, 1987.

6. When an individual is reviewing the Plan, it is necessary to cross-reference and consult with a large amount of written material, rules, regulations, and State law to determine whether or not the Plan complies with these rules, regulations, and laws. These rules, regulations, and laws include but are not limited to the following: (1) Huntington Beach General Plan (Scenic Highway Element); (2) Resource Inventory; (3) Resource Summary; (4) Resource Element; (5) Greer & Company Traffic Analysis Report; (6) Historical Resources Open Space and Conservation Element; (7) California Public Resources Code; (8) miscellaneous traffic studies. All of these rules, laws, regulations, and studies must be referred to in order to determine whether or not the proposed Plan complies with the requirements of the law. Once again, because the hearing process has been compressed into a relatively short period of time, there is insufficient time to adequately review and analyze these regulations.

In conclusion, I would once again respectfully request your cooperation in cancelling the hearing scheduled for October 9, 1987, wherein the State of California is scheduled to consider the Bolsa Chica State Beach General Plan. Approval of this Plan without the necessary public input would result in a substantial miscarriage of justice and would be granting a virtual blank check for development of our precious beach. Recent Court cases have held that in situations where a public hearing is required, the denial to

Santa Ana. In fact, the City Council was not even informed of the existence of the Bolsa Chica State Beach General Plan until August 24, 1987, which was one week after Mr. Thompson and Mayor Kelly met with you and made representations to the effect that the general plan had been previously approved.

Set forth below are numerous reasons which I would respectfully submit to you for your consideration in determining whether or not to cancel the State hearing scheduled for October 9, 1987.

1. As of the date of this letter, there have been absolutely no public hearings of any type whatsoever held in connection with the proposed Bolsa Chica State Beach General Plan.

2. In early August of this year, the Huntington Beach Planning Commission held a work-study session concerning the Bolsa Chica State Beach General Plan. Members of the public were permitted to attend this meeting, but they were not permitted to comment or testify on the Plan. In fact, quite to the contrary, members of the Commission stated that work on the Plan was just beginning and there would be plenty of time in the future for further input by members of the public concerning the proposed Plan. Unfortunately, this was not the case as the proposed plan was delivered to the State of California for processing before any local citizen input was permitted.

3. The Huntington Beach Planning Commission has scheduled a public hearing to be held on September 15, 1987, concerning the proposed Bolsa Chica State Beach General Plan. This is all well and good, however, the only problem is that copies of the proposed General Plan are not available from the City of Huntington Beach. Several members of Huntington Beach Tomorrow have within the last few days attempted to secure copies of the proposed Plan only to be told by City staff members that the Plan is not available, is at the printer, or they don't have sufficient copies available to distribute to members of the public. Lacking copies of the Plan to review and analyze, it is impossible for a member of the public to make any intelligent comments. The net effect of all this is to reduce the public hearing process to a sham.

4. After the Planning Commission hearing described above, the proposed Bolsa Chica State Beach General Plan has been scheduled for a public hearing to be held before the Huntington Beach City Council on September 28, 1987. This is only ten days before the Plan is to be considered by the State of California at the hearing to be held in Santa Ana on October 9, 1987. With the hearing process being "speeded up" in this manner, it deprives citizens of making any

the public of a **timely** right to be heard is grounds for setting aside any actions taken by the public agency that is involved. Simply stated, "Haste makes waste". I urge you to reconsider the necessity for having the public hearing on October 9, 1987, when the public's right to be heard has been obviously obstructed and thwarted by City officials. I suggest you inform the City that they will have to go back to square one and do it right as required by law.

Thank you for your assistance and cooperation in this matter.

Very truly yours,

Thomas G. Harman

THOMAS G. HARMAN
President

TGH/emt
cc: Les McCargo
George Dong
Tom Miller

RESPONSE TO COMMENTS BY THOMAS G. HARMAN,
P.O. BOX 865, HUNTINGTON BEACH, CA 92648
RECEIVED SEPTEMBER 15, 1987

1. This comments were directed towards the State Department of Parks and Recreation in order to postpone the October 9, 1987 meeting of the Parks and Recreation Commission. The meeting was held for discussion purposes and public testimony was received. However, a decision regarding the General Plan Amendment will be determined at the December 1, 1987 Parks and Recreation Commission meeting.

0324

Directors Office

SEP 14 1987

DEPT PARKS & RECREATION

RECEIVED

SEP 23 1987

Development Division

To: Mr. Henry Agonia, Director
Department of Parks & Recreation
P.O.Box 2390
Sacramento, California 95811

From: Kay Seraphine
509 17th Street
Huntington Beach, California 92648

Date: September 8, 1987

Dear Mr. Agonia:

As a citizen of Huntington Beach and as a member of that City's Environmental Board, I personally am becoming increasingly frustrated and angry with the speed with which the State Beach General Plan is being pushed through the process. The only meeting the Environmental Board (which has not yet taken a position) has before the September 15th Planning Commission meeting is on September 10th. That means all gathering of information (see attached list), reading and digesting that information, and preparation of the ad hoc committee report for presentation to the full Board must be finished previous to the 10th.

Furthermore, I feel the public hearing process has been prejudiced by the City's spending $705,566. for parking structure design, geological testing, and the negotiating of a contract for a restaurant at PCH and Goldenwest Street (State Beach General Plan, p.32). What this tells the citizens of Huntington Beach is that their public imput is merely a formality required by law, that the decisions on the State Beach Master Plan have already been made by the City.

Sincerely,

Kay Seraphine

cc: Mr. Les McCargo, Chief Deputy Director
Mr. Tom Miller, Superintendent, Orange Coast District

REFERENCE LIST

1. State Beach General Plan, August 1987
2. Resource Inventory for the State Beach General Plan
3. HB Open Space/ Conservation Element, Dec. 1980
4. HB Historical Resources Survey Report, Sept. 1986
5. HB General Plan, June 1984
6. HB Coastal Element, Revised 1984
7. HB Seismic-Safety Element, Oct. 1974
8. Alquist-Priolo Geological Hazard Zones Summary
9. HB Downtown Specific Plan, Nov. 1983
10. Los Angeles: The Architecture of Four Ecologies, Reyner Banham, Harper & Row
11. Smithsonian magazine, Sept. 1982, pg. 61+
12. Halcyon Report, Market Opportunities, Main-Pier Phase II Redevelopment Site, July 23, 1987
13. Parsons, Brinckerhoff Downtown Parking, Transit and Financing Study, Aug. 1985
14. Greer & Co, Technical Memorandum, Traffic Impact Analysis--Pierside Development Project, July 16, 1987
15. Public Resources Code, Article 1, State Park System, Policy No. 19, Concessions
16. Los Angeles Times, June 18, 1982, "Panel to Study Marsh Plan Today"
17. HB News, Sept. 4, 1987, "Robert Mayer Corp. Unveils New Plans For the Waterfront"

RESPONSE TO COMMENTS BY KAY SERAPHINE

509 SEVENTEENTH STREET

HUNTINGTON BEACH, CALIFORNIA 92648

RECEIVED SEPTEMBER 23, 1987

1. These comments were directed to Mr. Les McCargo of the State Department of Parks and Recreation and are intended to question the public hearing process which was used for the State Beach General Plan. In fact, the public hearing process was entirely legal and provided adequate opportunity for public review and input. The first Planning Commission public hearing was held on August 4, 1987, with the second Planning Commission hearing not held until September 15, 1987. The City Council public hearing is scheduled for November 2, 1987 with State Parks Commission action scheduled for December 1, 1987. This is a four month period during which public comments have been or will be solicited and received.

September 11, 1987

Kent Pierce, Chairman
Huntington Beach Planning Commission
2000 Main Street
Huntington Beach, California 92648

Dear Chairman Pierce

At our Septemoer 10th Environmental Board meeting, we discussed our environmental concerns of the North Side of the Pier project. Our discussion was based upon the diligent efforts of our Ad Hoc Committee who reviewed 21 documents all of which are listed at the end of this letter.

The Environmental Board recognizes the entire North Side of the Pier to be a highly sensitive area as classified in the State Beach General Plan, page 22. (limiting factors, very fragile or valuable cultural resources, very sensitive ecological resources, geological hazards and land instability).

We recommend approval on a General Plan level of Area 1 subject to a number of conditions listed below. We request tne Planning Commission to continue the conditional Use Permit for the parking structure and any discussion of the restaurant on top of the structure to be at a later time. The Site Plan and Conditions for the parking structure will not be ready for public distribution until September 11th, after our Septemher 10th Environmentsl Board Meeting. This project needs the careful scrutiny of the public and the time alloted for the review of this important documentation is not adequate.

(Conditions: Area 1)

1. A comprehensive geological analysis shall be conducted that will demonstrate clearly that the land is stable enough to support a tri-level parking structure. This analysis is to include questions regarding liquefaction potential and potential water table problems.

2. An appropriate environmental review shall be prepared to demonstrate the funneling of 1200 plus cars from a tri-level parking structure has no significant environmental impacts on PCH during holidays, the summer and/or other peak times.

3. The Final Site Plan shall be prepared limiting the height of any completed structure not to exceed the elevation of PCH.

4. City Staff shall provide sufficient documentation showing the following agencies having no significant input into the proposed project: Army Corps of Engineers, Cal Ttans, Fish and Game, Orange County Sanitation District and Orange County Environmental Agency.

The Environmental Boards concerns for Areas II and III

The Environmental Board recognizes the proposed plan for areas II and III as being in direct conflict with the Coastal Element. (ref. pg. 138 Coastal Element 1984 revised).

Our position may be summerized as follows:
A well-planned program for Areas I,II and III can be a public benefit as long as the environmental concerns we have outlined in this letter are appropriately addressed, especially since the entire north side of the pier is recognized as a highly sensitive area as classified in the State Beach General Plan. (pg. 22)

If you have any further questions, please feel free to contact us. Thank you.

Sincerely,

Tom Steele
Chairman
Ad Hoc Committee

Adhoc Committee Members

Dean Albright
Cindy Doe
Irene Alfieri
Cirrinne Welch
Kay Seraphine
Chuck Montero

Lee Weider, Chairman Huntington Beach Environmental Board

ccPlanning Commission
Ruth Finley, Liason
Peter Green, Liason
Tom Mays, Liason
Vic Leipzig, Liason
Paul Cook, Administrator
Planning Department

The additional documents that were researched are as follows:

1. Historic Resources Survey Report - City of Huntington Beach
2. Huntington Beach General Plan, June 1984
3. Coastal element, City of Huntington Beach, August 1980
4. Downtown Specific Plan, November 1983
5. Downtown Parking, Transit and Financing Study, August 1985
6. Traffic Impact Analysis, Greer and Company, July 1987
7. Retail Market Opportunities and preliminary Tenant Report for Main Pier, Phase II, July 1987
8. Alquist-Priolo Geological Hazard Zones Act - March 1985
9. State of California Division of Mines and Geology Report 1980/1981
10. Safety Element - City of Huntington Beach, 1974
11. Open Space and Conservation Element, City of Huntington Beach, December 1973
12. Open Space and Conservation Element, Background Report, August 1976
13. Open Space and Conservation Element Amendment 80-1, December 1980
14. Parks and Recreation Element
15. Letter to State Department of Parks and Recreation from Charles Thompson, August 1987
16. "A Last Hurrah for Seagirt" Smithsonian Magazine, 1982, Page 61-68, regarding Huntington Beach Pier
17. "Los Angeles: The Architecture of Four Ecologies" by Reynar Banham, page 52-53, regarding Huntington Beach Pier
18. Water Development in Orange County, Past, Present, and Future, August 1986 (Water Advisory Committee of Orange County)
19. Coastal Element revised 1984
20. Resource Element for the State Beach General Plan (provided by staff)
21. State Beach General Plan (provided by staff)

RESPONSE TO COMMENTS BY TOM STEELE, CHAIRMAN,
CITY OF HUNTINGTON BEACH ENVIRONMENTAL BOARD
RECEIVED SEPTEMBER 15, 1987

1. This is a typical site specific soil analysis that is normally required for similar structures pursuant to the City's Building Code.

2. This is a recommendation that can be further accommodated when the final design and size of the parking structure has been determined.

3. The final design and elevation of the proposed parking structure shall be determined by the City of Huntington Beach various state agencies and the public participation process.

4. All comments and corresponding responses have been incorporated as a part of this documentation.

5. This appears to be a conflicting opinion as City staff notes the contrary. Policies established by the Coastal Element were utilized as preliminary parameters to develop conceptual land uses.

Sept. 8,1987

Mr. Henry Agonia, Director
California Department of Parks and Recreation
1416 9th Street
Sacramento, Ca 95814

Dear Mr. Agonia:

This letter will address questions surrounding the Bolsa Chica State Beach and the so called General Plan proposed by the City of Huntington Beach to manage this facility on a lease agreement.

Certain City Officials and Council members past and present are attempting to force upon the citizens of Huntington Beach a shopping Center on the City Beach called Pierside Village. The latest extention of that so called Redevelopment plan is to extend the shopping center to the North side of the Pier (up coast side) and "redevelop" State Parkland with a restaurant and other facilities. The site is presently a State owned parking lot.

I represent a citizens group called Huntington Beach Cares that is unilaterally opposed to commercial centers on the beach and question the need for redevelopment or development north of the Huntington Beach Pier. I would like to make the following points regarding the City's plan:

1. I believe that the City of Huntington Beach may have violated California State Redevelopment law in not notifying the State that Parkland was being placed into redevelopment and stating what their plans were.

2. The proposed restaurant and other projects will screen the last view of the historic Huntington Beach Pier from Pacific Coast Highway. The Coastal Commission has declared Pacific Coast Highway along this area of Orange County as a Protected scenic route.

3. When Pierside Phase I village is completed there will be in excess of 65 establishments that serve food and beverages withing a 3 block area of the pier/main intersection.

4. The parking structure proposed for the site will benefit the builder of Pierside and make up the shortfall in parking in Pierside Phase I, to the detriment of the beach users.

5. Pacific Coast Highway is being expanded from 4 to 6 lanes in 1988 and this is being accomplished by the removable of Street parking on P.C.H. On Labor Day my wife and I took a tour of the area and found it entirely inadequate in Parking. The Beach lots, P.C.H. street parking, temporary lots and inland streets were jam-packed.

6

6. Commercial development of this parkland will create "traffic blight" on Pacific Coast Highway. This traffic problem will be overwhelming. Citizens will be discouraged from using Public and State Parkland. Cal-trans has estimated in their Environmental Impact Report (January 1986) that by the year 2000 the traffic will be operating at between level "D" and level "F" without either Pierside project!

The Beaches and Parks of California must be protected from the onslaught of the vested interests in development. Our Coast line must be protected. The Ocean and Beaches are the one great natural resource of this city. Greed is prevalent everywhere. Your office must protect the average citizen from the abuses of greedy and powerful politicans.

As I write this letter the City of Huntington Beach has not held Public Hearings on the Proposed General Plan for the Bolsa Chica State Beach. Huntington Beach Cares is concerned that our former City Adminstrator, Charles Thompson, has told the State of California that the Public has be noticed. This is not true. Please see attached newspaper articles from the Huntington Beach Independent.

Thank you. We will see you at the Public Hearing!

James A. Lane

James A. Lane
637 Frankfort Ave.
Huntington Beach, Ca 92648

Member, Steering Committee
Huntington Beach Cares

Members: Huntington Beach City Council
Huntington Beach Planning Commission
Huntington Beach Tomorrow
Huntington Beach Cares
Huntington Beach City Clerk
Huntington Beach City Planner, Mr. Hal Simmons

RESPONSE TO COMMENTS BY JAMES A. LANE
637 FRANKFORT AVE., HUNTINGTON BEACH, CA
RECEIVED SEPTEMBER 15, 1987

1. This is not within the scope of the project, and, therefore, no response is necessary.

2. Through the public hearing process, it appears that the view impacts through relocation of the proposed restaurant or some other mitigative measure.

3. This is an opinion (calculated) and does not warrant a response.

4. The primary intent of all proposed parking is to replace parking areas eliminated by the widening of Pacific Coast Highway and to accommodate other beach use traffic.

5. This is an observation and does not warrant a response.

6. The referenced "traffic blight" cannot solely be attributed to the proposed General Plan Amendment.

7- P.C.
1- CWT
1- Cook
1- Doug LaBelle
1- Hal Simmons

RECEIVED
CITY CLERK
CITY OF
HUNTINGTON BEACH, CA.
SEP 9 3 23 '87

Sept. 8, 1987

Mayor, City Council and Planning Commission Members
Attn: City Clerk
2000 Main St.
Huntington Beach, CA 92648

Dear Mr. Mayor, Council and Planning Commission Members,

I am writing to you regarding the Bolsa Chica State Plan, which will soon be before you for review. I urge you to use extreme caution in approving any building north of the pier. I am particularly concerned that if a parking structure is built north of the pier, commercial establishments will be allowed on top of the structure, and the scenic beauty of this town will be destroyed.

1 We must protect our beach and view from destruction. Please do not allow yourselves to give in to development, sacrificing what this city is all about. I urge you to dedicate the top of any parking structure north of the pier to a park, forever. If this parking structure were to be 1 foot below PCH, without building on top, none of the views would be destroyed.

Huntington Beach stands alone in southern California in showing concern for the beach, views and general protection of the environment. We must continue this position. Commercial development on the inland side of PCH is necessary to revitalize, but please allow this city to be the special place it is.

Thank you for your consideration.

Sincerely,

Irene C. Briggs

Irene C. Briggs
602 8th St.
Huntington Beach, CA 92648

RESPONSE TO COMMENTS BY IRENE BRIGGS,
602 8TH STREET, HUNTINGTON BEACH, CA 92648
RECEIVED SEPTEMBER 23, 1987

1. These are general comments regarding view preservation. These comments are noted and accepted.

September 1, 1987

Mike Adams
Planning Department
C/O City Clerk (for the record)
2000 Main St.
Huntington Beach, CA 92648

I am writing in reference to the North Of The Pier Resource Inventory and General Plan (Development Plan). Any plans to use this area for development must be discontinued. Such plans would destroy one of the best California coastlines in addition to blocking the coastal view from Pacific Coast Highway. Furthermore, any development on the beach side of Pacific Coast Highway would not be in the best interests of either the general public or of Huntington Beach citizens.

I urge you to consider that the above referenced area be permanently dedicated to the beachgoing public.

Thank you for your attention to this matter.

Sincerely,

Sally Lemon

Sally Lemon
19843 Cambridge Lane
Huntington Beach CA 92646

RESPONSE TO COMMENTS BY SALLY LEMON,
19843 CAMBRIDGE LANE, HUNTINGTON BEACH, CA 92646
RECEIVED SEPTEMBER 23, 1987

1. This is a general comment regarding the disposition or approval of any development on the beach area. Comment has been noted and accepted.

Gregory S. Page
5071 Vane Circle
HB., CA., 92647
15 Sept. 1987

Commissioners,

I am writing regarding your discussions on the State Beach General Plan (item C5 from your 15 Sept. 1987 agenda). I was pleased to see your deletion of the proposed restaurant located on top of the planned parking structure in Region 1. I agree that this service should not be on state beach property as a commensurate service is already provided at that same location by Maxwells, and providing a duplicate service would be in opposition to the state guidelines regarding use of state park (beach) property.

1 I am concerned that the planned Region 1 parking structure could be used in such a manor as to make it too be in opposition to the state park use guidelines, which prohibit using state park property as a profit making venture. I feel that since the intent of providing the parking structure on state beach property is to provide parking for state beach use, wording should be included in the general plan assuring priority use of the parking available for state beach patrons. I feel the best means to assure this use is to make the parking facility fee structure comparable with other existing city and state beach parking facilities. Parking in the Region 1 parking structure should be by fee, at a single "all day" rate, or by municipal or state beach parking pass only. Reduced rate short term parking, such as parking meters, and validated parking should be prohibited by the general plan. Validated parking would clearly be in opposition to the state park guidelines as it would allow private enterprises not located in the state beach area to directly receive a subsidy to their profits from state beach facilities.

This parking fee structure should be extended to parking in Regions 2 and 3 if the physical layout of the facilities can be made to be compatible with single point regulated entry such as will be present at the Region 1 parking structure. A limited amount of short term no fee view parking should be provided in Region 3 by setting aside a few spaces for 10 minute no fee parking.

I would be happy to discuss these items further with either you or your staff if desired.

Sincerely,

Gregory S. Page

David Hall
9702 Madison Circle
Garden Grove, CA 92644
September 10, 1987

The Planning Commission
Huntington Beach City Hall
2000 Main Street
Huntington Beach, CA 92648

Dear Planning Commissioners:

I wish to raise some questions and concerns regarding the State Beach General Plan, submitted to the city in August of 1987. As a state beach user and taxpayer I appreciate this opportunity to address the commission.

The following issues will be addressed in this letter: visual impact of the project, esthetic resources, transit and public access, the environmental impact and parking access. Finally, some general comments will be raised regarding the purpose and character of the state beach.

First, many questions come to mind regarding the visual impact of the proposal. Please refer to page 26 of the document where it states the parking structure "will not extend above the elevation of PCH..." Does this mean there will be no blocking of a visitor's ocean view from PCH? If so, how much? There are no drawings to represent what the project will look like or how great an impact will be made on visual access. Furthermore, even if the project only reaches to PCH, what about facilities and landscaping placed on the parking

1

2

structure? How will that impact visual access? In addition, what impact will the structure have on someone viewing the downtown area from the ocean? Will the entire view of downtown be blocked? There is no mention of this potential consequence of enacting this proposal. Finally, what will the structure look like when empty during the winter and autumn seasons? How does a three story empty structure look in the middle of the beach? Is it worth the cost to taxpayers to construct a structure that will be empty nearly the entire year? Will it be worth the visual impact upon beach users? 3

Second, on page 20, "Esthetic Resources," the document states that scenic resources shall be protected. How? As mentioned above, I find it hard to determine exactly what the impact shall be as the document avoids addressing this in specific terms. I agree that utility structures should be placed underground. Why are bluff walls needed? What are "attractive" walls as stated on page 20? I find the bluffs a unique characteristic of the state beach. Will all the bluffs be covered with walls? Will a concrete wall add to esthetics or take away from the coast's esthetics? What about the the area between the wall and the bluff- will it become a huge garbage can where clean up becomes difficult? What will the walls look like in relation to the bluffs? Again 4 5 6 7

the document offers no graphic representation for the reader, nor does it even mention it in written terms.

Third, page 38 refers to transit concerns. Yes, there are many bus routes along the coast. However, are you aware that from Goldenwest Street all the way to Warner and PCH there are no bus stops. If you look at the map on page 28, there are no stops along this route designated "Area III." Does this lack of services impact public access? I think so. If state beach usage increases with the implementation of this proposal, how can the OCTD continue to completely ignore the entire Area III? The document does not even mention this transit concern. 8

Next, environmental impacts will be discussed. Please refer to pages 33 and 34. On page 33 it is stated that the project will not have an adverse impact on the environment on account of mitigation measures. That is an untrue statement as mitigation measures only "mitigate" adverse impacts, they do not eliminate adverse impacts of projects! On page 34, for example, increased light and glare will be mitigated by landscaping, however what impact will still remain? Will the glare still remain at night and by how much? How can an increase in traffic and decrease in air quality be mitigated? 9 10

(4)

In addition, regarding the parking access I wonder if the cost will be justified for construction of the parking structure if it is only used off-season? Furthermore, will the structure be used to provide parking for visitors using the Perside Village project? If so, should the state beach be used as a parking lot for the city beach? Should the state beach users be impacted to make up for a lack of parking for Perside Village south of the pier? I think it is unfair since this seems to be the case. 11

Finally, the state beach belongs to state residents and I resent the adverse impacts this project will have on state residents just to give a parking structure to the city's Perside Village. I say let the state beach be just that, a beach, not a parking structure for the city's grand development plans that will ruin the city beach. As a state beach user I wonder how many state residents would resent the proposal in its present form 12

Again, your attention is appreciated.

Respectfully,

David Hall

cc: Dept of Parks and

RESPONSE TO COMMENTS BY DAVID HALL
9702 MADISON CIRCLE, GARDEN GROVE, CA 92644
RECEIVED SEPTEMBER 12, 1987

1. The General Plan proposes the location and conceptual design of structures, respectively. Final design and elevations of any structures shall be determined by the City of Huntington Beach, various state agencies and through public participation.

2. It is anticipated that the majority of the roof of the structure will be utilized for both passive and active recreation.

3. The proposed siting of the parking structure will not be in the middle of the beach. Rather, it is situated were the existing terraced parking is - adjacent to the north side of the pier.

4. The majority of the 100 acre± area will not have view obstructive structures above the grade level of Pacific Coast Highway.

5. The existing bluff walls serve to reinforce and stabilize the bluff area which is generally composed of weak sedimentary material that is subject to a moderate to high rate of erosion. The term "attractive" generally refers to the absence of grafitti blight. Attractive may mean a blank face or artistic designs or murals.

6. It is not anticipated that additional bluff walls will be constructed.

7. Fill material (e.g., back soil) and landscaping will be used to prevent debris collection.

8. Currently, there are no OCTD transit bus stops between Golden West Street and Warner Avenue. The primary reason is that the current road design precludes such stops as well as the presence of on-street parking. The General Plan does designate Area III as having access inadequacies and recommends an improved bike trail, rest stops and improved direct access to the beach area (pg. 27).

9. The General Plan expresses conceptual uses at various locations within the unit. It is the first of a series of planning actions prior to the realization to use form and function. Section 15004 of the CEQA Guidelines states that environmental documents should be "...prepared as early as feasible in the planning process to enable environmental considerations to influence project program and design..." Mitigating measures will be the result of environmental constraints, responsible agencies' comments, public input and, ultimately, design elements. Therefore, adverse impacts may be anticipated and avoided through the aforementioned process.

10. Traffic and air quality are regional issues which have been addressed in referenced environmental documents. The subject area (and planned uses) do not represent a new generation source of traffic and degradated air quality.

11. Financial implications are not delineated at this time for the purpose of this document. However, the City is currently preparing cost estimates for the proposed improvements.

12. The primary intent for all proposed parking is to replace the on-street parking will be removed as the result of widening Pacific Coast Highway; which is currently serving the beach going population.

Cook

Douglas M. Langevin
Co-Director, Huntington Beach Cares
8196 Pawtucket Drive
Huntington Beach, CA 92646
(714) 960-5872

August 26, 1987

Mr. George Dong
Landscape Architect
Department of Parks and Recreation
P. O. Box 2390
Sacramento, CA 95811

RECEIVED
SEP 3 1987
CITY OF HUNTINGTON BEACH
ADMINISTRATIVE OFFICE
RECEIVED
CITY CLERK

RE: North-of-the-Pier Bolsa Chica
State Beach General Plan

Dear George:

Pursuant to our phone conversation of August 26th I am enclosing the following documents:

A. General Plan - State Beach General Plan;

B. Huntington Beach Planning Commission Agenda pages for August 4, 1987 pertaining to above General Plan;

C. Huntington Beach Planning Commission Action Agenda page for August 4, 1987 with Instructions to Staff on General Plan;

D. Huntington Beach City Council Redevelopment Agency page for July 6, 1987, Item E-3e - Pierside Village Phase II Authorization to Proceed;

1

E. Huntington Beach City Council Redevelopment Agency page for July 27, 1987, Item 2 - Reimbursement Agreement for the Design and Preparation of Construction documents for parking structure within the Main-Pier beach project area;

F. Huntington Beach City Council Redevelopment Agency Agenda pages for August 24, 1987, Item F-3d - Authorization for Request for Qualifications and proposals for Pierside Phase I and II Project Construction Management Consulting Service, and Item F-3e - Approval of Consultants and Reimbursement for the Design of Parking Structure within the Main-Pier Redevelopment Project Area;

G. State of California Department of Parks and Recreation Operating Agreement - Bolsa Chica State Beach, pages Index, 5 and 12, signed December 1, 1986 and approved January 13, 1987;

H. State Beach General Plan, August, 1987, page 32 - Potential Concession Activities;

I. City of Huntington Beach Downtown Specific Plan Draft, May, 1982, pages 93-95; and

J. City of Huntington Beach Downtown Specific Plan (Sixth revision), March, 1985, pages 31 and 115-117.

I bring to your attention for your consideration:

Item "A" is the only General Plan for the Bolsa Chica State Beach that has had a hearing of any kind, and as you note in items "B" and "C", the hearing was, in reality, a study session for open comments and no vote or decision was made. Please also note that on Item "C" under action, the staff is directed to incorporate comments from the Commissioners into "further studies made of the area". This was not done and no mention of a General Plan is made. Item "D" in the Huntington Beach Council/Redevelopment Agency Agenda (Item E-3e) shows the first action taken to let contracts for construction of Pierside Phase II on Bolsa Chica State Beach by the Huntington Beach City Council/Redevelopment Agency. Items "E" and "F" are further contracts entered into by the City for construction of Pierside Phase II on Bolsa Chica State Beach. All of these items would seem to violate the provisions of Item "G", State Parks and Recreation Operating Agreement for Bolsa Chica State Beach, page 5, paragraph 7 which states:

"7. CONSTRUCTION OF IMPROVEMENTS: City may, by its own forces or by contract, undertake projects for the development, construction, or improvement to said property. Plans and specifications for any such project shall be submitted to State as a State General Plan amendment for approval. No such project shall be commenced by City's own forces or contracts awarded prior to State approval."

Especially noteworthy is that the City Council/Redevelopment Agency took action on Items "D" and "E" before a General Plan even existed

or a study session was held, and also took action on Item "F" before recieving a copy of the General Plan.

Item "H', potential concession activities, gives the City a "blank check" for the construction of another "concession facility near Goldenwest Street. Information received by us and confirmed by sources in City Hall causes us concern that plans are going forward today not only for a restaurant on the Pierside Phase II North-of-the-Pier parking structure, but also near Goldenwest Street as well. We can support concessions on wheels (temporary trailers) but no permanent structure adjacent to the pier or at the Goldenwest location are acceptable.

Finally, Items "I" and "J" are included to show the scope of how the City Council/Redevelopment Agency plans have changed over the years. Item "I" was the first draft of the Downtown Specific Plan available, dated May, 1982, of which I enclose the section on District 10 - The Pier Area. Item "J" is the latest Downtown Specific Plan, which is the sixth revision, dated March, 1985. I enclose the Section on District 10, Pier Area. Please note the major changes in scope and purpose of District 10 over three years. Also note on page 31, paragraph 3 that Pierside Village does not conform to this plan. There has been no development in District 3 and further inland, therefore it is inappropriate that Pierside Village precede the inland development. It clearly states that inland development ". . . will directly determine the amount of revitalization which can occur to the pier and the beach-related commercial uses which can be accommodated." Currently the City is moving forward with the South-of-the-Pier commercial shopping center with over 30% fast food outlets and three major restaurants. Now there is an attempt to expeditiously process (in one month's time) through the City's public hearing process, Coastal Commission, and the State Department of Parks and Recreation, a further ambitious plan to include additional possible large commercial and restaurant complexes. This plan will not only commercialize the beach and preempt our impending Main Street commercial redevelopment, but also constribute to the destruction of our greatest scenic and natural resource - our Pacific Ocean frontage.

Sincerely yours,

Doug Langevin

DOUG LANGEVIN

DML:mt
cc: Henry Agonia, Director
Huntington Beach City Council
Huntington Beach Planning Commission
Tom Herman, President HB Tomorrow

RESPONSE TO COMMENTS BY DOUGLAS M. LANGEVIN
8196 PAWTUCKET DRIVE, HUNTINGTON BEACH, CA 92646
RECEVIED SEPTEMBER 4, 1987

1. These comments consist of correspondence from Mr. Langevin to Mr. George Dong, Landscape Architect, Department of Parks and Recreation. The issues discussed in this were of a greater scope than established by the subject General Plan as indicated by the various documents that were mentioned. These comments are accepted and noted without specific responses.

Shell Western E&P Inc.
A Subsidiary of Shell Oil Company

P.O. Box 11164
Bakersfield, CA 93389

August 14, 1987

Mr. Hal Simmons
City of Huntington Beach
Department of Community Development
2000 Main St.
Huntington Beach, CA 92648

Dear Mr. Simmons:

SUBJECT: PL-70096
HUNTINGTON BEACH FIELD
ORANGE COUNTY, CA.
NORTH OF THE PIER PROJECT

Reference is made to our telephone conversation of August 13, 1987, regarding the City's proposed North Of The Pier development project. I attended the Planning Commission's public hearing on August 4 and obtained information about the project.

On August 1, 1986, Shell Western E&P Inc., a subsidiary of Shell Oil Company, acquired Phillips Petroleum Company's interest in the Huntington Beach Field. We have four (4) State wells which will be affected by area II of your project.

1 Access to these wells is by a narrow road off Pacific Coast Highway at Golden West. Your plan shows that you propose to use this road for access to parking areas which will be constructed in the narrow strip of land between the access road and the bluff; and, that cars will be parked between and next to our oil wells. While we wish to work with the City and cooperate whenever possible, we obviously have serious concerns about this portion of your project. Some of these concerns are:

1. Safety to the Public due to vehicle and pedestrian traffic near operating oil and gas wells.

2. Increased liability.

3. Access to our wells for maintenance and inspection.

4. Limited future development.

Once we have had a chance to review your project in more detail we will be glad to meet with you.

As we discussed, please see that the Planning Commission receives a copy of this letter. If you have any questions please feel free to call me at (805) 326-5343.

Very truly yours,

Allen S. Kennedy
Land Department
California Division

ASK:bal

RESPONSE TO COMMENTS BY ALLEN S. KENNEDY
SHELL WESTERN E&P INC., P.O. BOX 11164
BAKERSFIELD CA 93389

1. Existing uses such as the referenced wells will be given priority when new development occurs. Currently, the General Plan does designate parking along the surface road and a conceptual plan has been prepared. However, a final design will assure access, adequate buffer, and traffic control measures that will minimize pedestrian, bicycle and vehicular conflicts.

7- Council
7- P.C.
11- C WT
1- Cook
1- LABELLE
1- HAL SIMMONS

O'CONNOR Mailing Address P.O. Box 4459 Long Beach, California 90804
2669 Myrtle Ave. Signal Hill California 90806 (213) 426-8135

AGENCY inc. Advertising & Design

September 2, 1987

Hal Simmons
c/o City Clerk
For the Record
2000 Main St.
H.B., CA 92648

Re: North Side of Huntington Beach Pier

Dear Mr. Simmons:

It is in the best interests of the citizens of California that the top of all structures be kept one foot below the level of Pacific Coast Highway.

By enforcing that minimal restriction private enterprise will be co-existing with public need.

Obviously the tops of any structures should be designated a city park or "view corridor" so that nothing on top of the buildings could protrude an interrupt the view. We live in Huntington Beach neighborhood where just such a compromise was worked out to the benefit of all.

A walk down the main streets in Miami Beach or Waikiki will clearly show how an ocean front community can easily lose it's most valuable resource if it doesn't guard it jealously!

Let's leave a view for our grand kids. . . . and the developers.

Sincerely,

William Halpin

WH:pw

cc/ Conway

RESPONSE TO COMMENTS BY WILLIAM HALPIN

P.O. BOX 4459 LONG BEACH, CA 90804

RECEIVED SEPTEMBER 4, 1987

1. The General Plan proposes the location and conceptual design of structures, respectively. Final design and elevations of any structures shall be determined by the City of Huntington Beach, various state agencies and through public participation.

cc: C O'HARA

August 28, 1987

Mike Adams
Planning Department
C/O City Clerk (for the record)
2000 Main St.
Huntington Beach, CA 92648

I am writing in reference to the North Of The Pier Resource Inventory and General Plan (Development Plan). Any plans to use this area for development must be discontinued. Such plans would destroy one of the best California coastlines in addition to blocking the coastal view from Pacific Coast Highway. Furthermore, any development on the beach side of Pacific Coast Highway would not be in the best interests of either the general public or of Huntington Beach citizens.

I urge you to consider that the above referenced area be permanently dedicated to the beachgoing public.

Thank you for your attention to this matter.

Sincerely,

Kazuko Parker

Kazuko Parker
15521 Mayflower
Huntington Beach CA 92647

RESPONSE TO COMMENTS BY KAZUKO PARKER
15521 MAYFLOWER HUNTINGTON BEACH, CA 92647
RECEIVED SEPTEMBER 4, 1987

1. The General Plan proposes the location and conceptual design of structures, respectively. Final design and elevations of any structures shall be determined by the City of Huntington Beach, various state agencies and through public participation.

7 - Council
1 - La Belle
1 - Cook
1 - H. Simmons
1 - Thompson

RECEIVED
CITY CLERK
CITY OF
HUNTINGTON BEACH
SEP 8 12

124-16th St.
Huntington Beach, Calif.
Aug. 30, 1987

Dear Mr. Simmons,

Ref: North side of the pier, resource and inventory and general development plan.

We are concerned residents regarding the parking structure north of the pier. The unobstructed view of the ocean is very important to my wife & I and future generations. Please consider top of the parking structure to be one foot below Pacific Coast Highway and a green belt covering the roof. This would not obstruct the view of the ocean and camouflage the parking structure.

1

Respectfully

Warren H. & Violet Cowden

RESPONSE TO COMMENTS BY WARREN W. AND VIOLET COWDEN
124 16TH STREET, HUNTINGTON BEACH, CA
RECEIVED SEPTEMBER 8, 1987

1. The General Plan proposes the location and conceptual design of structures, respectively. Final design and elevations of any structures shall be determined by the City of Huntington Beach, various state agencies and through public participation.

September 2, 1987

Hal Simmons
C/O City Clerk
2000 Main Street
Huntington Beach, CA 92648

Re: Northside of Pier

Dear Mr. Simmons:

As a concerned citizen of Huntington Beach, I would like to share with you my interest. With respect to the Northside of the Pier, the parking lot should be kept below the level of Pacific Coast Highway and I would like to suggest that at the top of the structure there should be a permanent city park for the enjoyment of us residence.

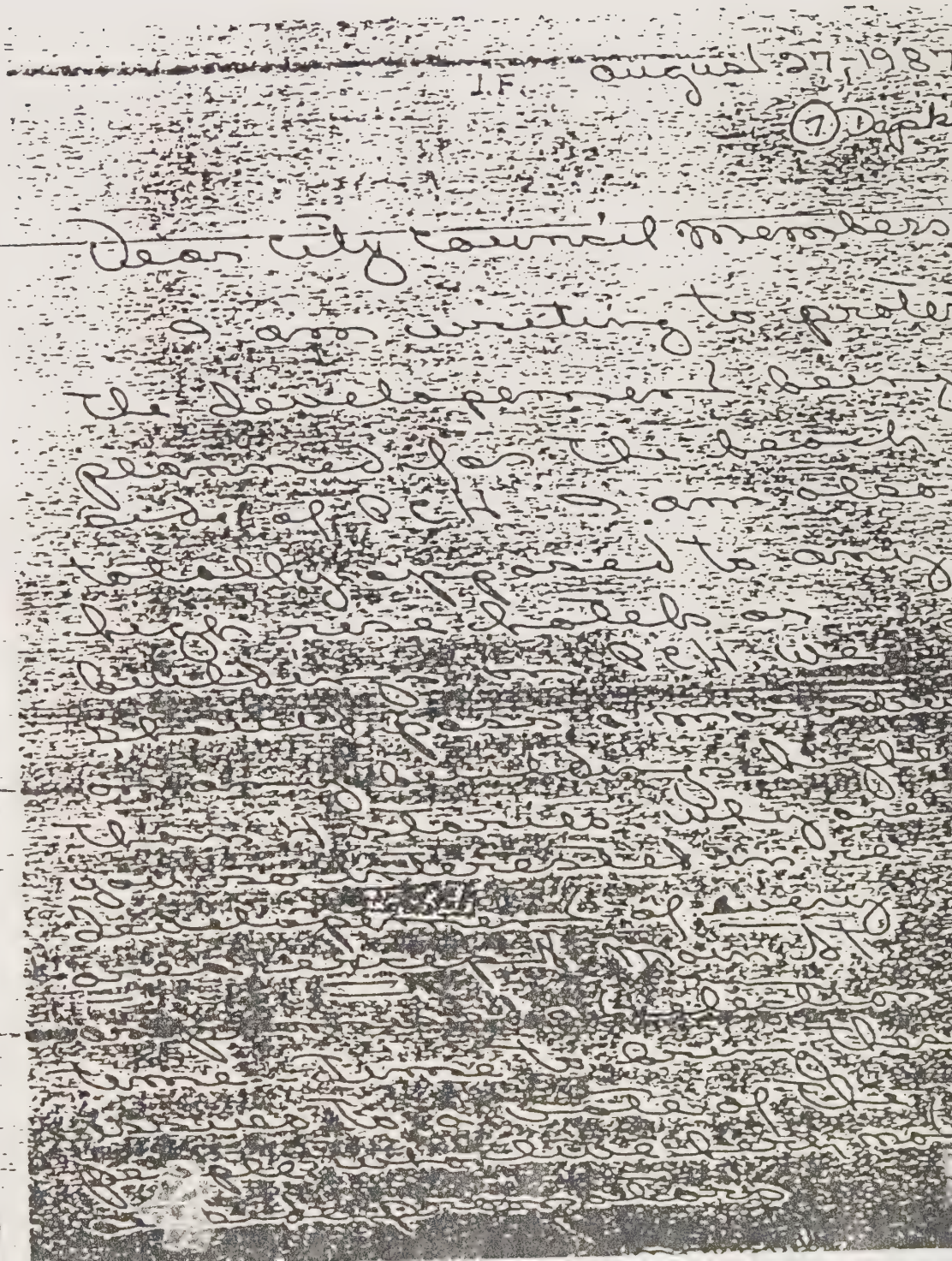
Thank you for you attention in this matter.

Sincerely,

Rachel Kaloian
1803 California St.
Huntington Beach, CA 92648

RESPONSE TO COMMENTS BY RACHEL KALOIAN
1803 CALIFORNIA STREET, HUNTINGTON BEACH, CA 92648
RECEVIED SEPTEMBER 8, 1987

1. The General Plan proposes the location and conceptual design of structures, respectively. Final design and elevations of any structures shall be determined by the City of Huntington Beach, various state agencies and through public participation.



RESPONSE TO COMMENTS BY JOANNE FLICK

(NO ADDRESS)

RECEVIED SEPTEMBER 8, 1987

1. These are general comments on redevelopment and hotel construction which are not directly related to the proposed project. No additional response is necessary.

Environmental Board
CITY OF HUNTINGTON BEACH
Post Office Box 190 • Huntington Beach, California 92648

September 11, 1987

Kent Pierce, Chairman
Huntington Beach Planning Commission
2000 Main Street
Huntington Beach, California 92648

Dear Chairman Pierce:

At our September 10th Environmental Board meeting, we discussed our environmental concerns of the North Side of the Pier project. Our discussion was based upon the diligent efforts of our Ad Hoc Committee who reviewed 21 documents, all of which are listed at the end of this letter.

The Environmental Board recognizes the entire North Side of the Pier to be a highly sensitive area as classified in the State Beach General Plan, page 22, (limiting factors: very fragile or valuable cultural resources, very sensitive ecological resources, geological hazards and land instability).

We recommend approval on a General Plan level of Area I subject to a number of conditions listed below. We request the Planning Commission to continue the Conditional Use Permit for the parking structure and any discussion of the restaurant on top of the structure to be at a later time. The Site Plan and Conditions for the parking structure will not be ready for public distribution until September 11th, after our September 10th Environmental Board meeting. This project needs the careful scrutiny of the public and the time allotted for the review of this important documentation is not adequate.

(Conditions: Area I)

1. A comprehensive geological analysis shall be conducted that will demonstrate clearly that the land is stable enough to support a tri-level parking structure. This analysis is to include questions regarding liquefaction potential and potential water table problems.

2. An appropriate environmental review shall be prepared to demonstrate that the funnelling of 1400 plus cars from a tri-level parking structure has no significant environmental impacts on PCH during holidays, the summer and/or other peak times.

3. The Final Site Plan shall limit the height of any completed structure to not exceed the elevation of PCH.

4. City Staff shall provide sufficient documentation showing the following agencies having no significant imput into the proposed project: Army Corps of Engineers, Cal Trans, Fish and Game, and the Orange County Sanitation District.

The Environmental Board's concerns for Areas II and III:

The Environmental Board recognizes the proposed plan for Areas II and III as being in direct conflict with the Coastal Element of Huntington Beach, Section 9.5.3, 6b, which states "Prohibit any alteration of the natural landform of the bluffs seaward of Pacific Coast Highway including grading and the development of parking lots;"

Our position may be summarized as follows:
A well-planned program for Areas I, II, and III can be a public benefit as long as the environmental concerns we have outlined in this letter are appropriately addressed, especially since the entire north side of the pier is recognized as a highly sensitive area as classified in the State Beach General Plan, pg. 22.

If you have any further questions, please feel free to contact us. Thank you.

Sincerely,

Tom Steele
Chairman
Ad Hoc Committee

Lee Wieder

Lee Wieder, Chairman
Huntington Beach Environmental Board

Additional documents that were researched are as follows:

1. Historic Resources Survey Report--City of Huntington Beach
2. Huntington Beach General Plan, June 1984
3. Coastal Element, City of Huntington Beach, August 1980
4. Downtown Specific Plan, November 1983
5. Downtown Parking, Transit and Financing Study, August 1985
6. Traffic Impact Analysis, Greer and Company, July 1987
7. Retail Market Opportunities and Preliminary Tenant Report for Main Pier, Phase II, July 1987
8. Alquist-Priolo Geological Hazard Zones Act--March 1985
9. State of California Division of Mines and Geology Report, 1980/1981
10. Safety Element-City of Huntington Beach, 1974
11. Open Space and Conservation Element, City of Huntington Beach, December 1973
12. Open Space and Conservation Element, Background Report, August 1976
13. Open Space and Conservation Element Amendment 80-1, December 1980
14. Parks and Recreation Element
15. Letter to State Department of Parks and Recreation from Charles Thompson, August 1987
16. "A last Hurrah for Seagirt" Smithsonian Magazine, 1982, pg. 61-68, regarding Huntington Beach Pier
17. "Los Angeles: The Architecture of Four Ecologies" by Reynar Banham, pages 52-53, regarding Huntington Beach Pier
18. Water Development in Orange County, Past,Present, and Future, August 1986 (Water Advisory Committee of Orange County)
19. Coastal Element, revised 1984
20. Resource Element for the State Beach General Plan
21. State Beach General Plan

RESPONSE TO COMMENTS BY TOM STEELE
HUNTINGTON BEACH ENVIRONMENTAL BOARD

1. A geologocal analysis will be required prior to approval of building permits, as a condition of entitlement.

2. The conditional use permit for the project will address vehicle ingress and egress from the site.

3. The State Beach General Plan Amendment stipulates that the top of the parking strucure shall be one foot below the elevation of Pacific Coast Highway.

4. The project was advertised by the California State Clearinghouse for a 30-day CEQA review period. All written comments which were received by governmental agencies have been incorporated into this attachment.

BOLSA CHICA STATE BEACH
GENERAL PLAN AMENDMENT
Fiscal Analysis

This analysis examines major recurring revenue and cost factors associated with the proposed land uses in the Bolsa Chica State Beach General Plan Amendment. There will also be a discussion of assumptions associated with the cost of the proposed project as it relates to estimated revenue.

A profile of the proposed land uses examined in this analysis is as follows:

- Parking structure, 1400 spaces.
- Full service restaurant, 10,000 square feet.
- Beach concession, 2,500 square foot, located within the parking structure.

The 3.9 acre site is State land and, therefore would not generate property tax. The proposed parking facility (which would include beach concessions) would be owned by the City and also not generate property tax. The cost of the parking structure could be covered by bond funds, or part of the cost may be incurred by CALTRANS for replacement parking that will be lost when the Pacific Coast Highway is widened. Whatever form of funding is acquired, parking fee revenue will not be used to offset the cost of construction. The City will also own the restaurant, and it too, will be constructed and operated by a private developer. The restaurant lease agreement is a component of the Pierside Village lease agreement. As with the parking structure, local revenue will not offset costs of construction. The developer will incur those costs.

In general, lease and parking fees are structured so that they cover all City costs ranging from beach maintenance to police services. The annual costs examined in this analysis are limited to police and fire services assuming that some annual costs will occur that may not be covered by the lease and parking revenue. Also, the annual costs only reflect the restaurant and concession operation as there is currently inadequate information with which to measure police and fire services associated with parking structures in the city.

Attachment #5

The factors applicable in this analysis are as follows:

Revenues

Sales Tax
Utility Taxes
Business License Fees
Lease Fees
Parking Fees

Costs

Fire
Police

1.0 REVENUES

1.1 Sales Tax

The State of California places a six percent sales tax on retail sales. Of that six percent the City receives 16.6 percent or one cent for every six cents collected.

Commercial retail sales tax revenue is based on an estimated sales per gross leasable square feet, (85 percent of the total building square footage) derived from the Dollars and Cents of Shopping Centers, compiled and published by the Urban Land Institute.

For the purpose of this analysis, a range of annual sales per square foot for the restaurant will be assessed. Based on 8,500 square feet (leasable space) a figure of $170/sq. ft. and $250/sq. ft. for annual taxable retail sales will be assessed and shown separately in table from at the conclusion of this analysis. The per square foot sales estimate for the concessions is $130 per square foot (for 2125 square feet). Typically, concessions, like fast–food chains have a higher sales figure per square foot than full service restaurant. The figures used in this analysis considers the decline in customers during the off–season for the concessions but anticipates a more constant level of business for the restaurant.

1.2 Utility User and Franchise Tax

Huntington Beach collects a five percent utility use tax on the annual sales of electricity and natural gas services in the City.

A franchise tax of one percent of the annual electricity sales and four percent of the annual natural gas sales is collected from the respective utility providers in the City.

Factors provided by the electric and gas companies, and titled commercial, combine retail commercial, general office and industrial. Although a parking structure would certainly generate electricity sales and revenue, the figures provided by Edison would not be applicable to a parking structure as it would require less electricity than conventional commercial facilities. Therefore, the contribution to the utility revenue from the parking structure is not included in this analysis.

Factors used for this section are as follows:

Electricity

According to the California Energy Commission, average electricity charges are:

> Commercial – .0894 cents per kilowatt hour, using 12.2 KWH per square foot per year applied to commercial and recreation developments.

Natural Gas

Average natural gas charges are:

> Commercial = $.669 per million BTU's, using an annual rate of .42 BTU's per square foot applied to commercial and recreational developments.

1.3 Business License Fee

All businesses, commercial and industrial, in the City are required to have a license. Business license fees are based on the number of employees per business and also a fee per number of trucks. It is not feasible to estimate the number of trucks per business; employees per business have been estimated based on the following assumption.

Based on leasable square feet, both the restaurant and concessions will have an estimate of one employee per 250 square feet.

1.4 Lease Fees

As discussed previously, a lease agreement for the restaurant has been proposed as a component of the Pierside Village agreement. This restaurant would therefore be charged a minimum of $4.00 per sq. ft. based on annual income. Once an annual income of $40,000 is reached than the lease fee will be based on a percentage of the income. For the first six years of operation the rate will be 12 percent, after six years the annual rate will increase to 15 percent. The restaurants estimated annual income in two scenarios assessed in this analysis exceeds $40,000 per year. For this analysis an annual lease rate of twelve percent will be used.

For the concessions there would be no minimum fee; the payment is based on 12.5 percent of annual gross income.

Sales per square foot estimated in the sales tax section are applicable to the above factors.

1.5 Parking Fees

It is estimated that each space in the parking structure would generate an average of $4.00 in fees per day at an annual sixty percent occupancy rate. The rationale for using a sixty percent occupancy rate is based on an existing market analysis for the area and parking activity for the existing parking lot with in the proposed project site. During the summer months State Park staff reported that the parking lot averages two vehicles per day per space. The figure used in this analysis is based on a daily rate of one vehicle per day per space. Also, in conjunction with Pierside Village, it is expected that the parking structure would be utilized at night. It is anticipated, that the "Village" would also draw visitors in the Winter, where there is no attraction now. All of the above factors contribute to the estimated occupancy rate.

2.0 COSTS

Although annual costs are expected to be covered by lease and parking fees, staff has included a brief examination of police and fire costs assuming it is feasible that some police and fire services may not be covered by the revenue generated by the operations.

2.1 Police

Commercial land uses typically require one call per 1,693 square feet.

Calls relate to the number of additional officers per year that would be needed to service new development. A patrol officer's average annual salary, including benefits, is $54,000. Five or more officers would result in capital expenditures, such as a vehicle. When calls per year reach 535, the Police Department would recommend hiring an officer. For the purpose of this analysis,, it will be assumed that the Department will incur a cost whether the calls for a particular project reach 535 or a portion of that total.

2.2 Fire

Commercial land uses in the City impact the following fire Department programs:

Six percent of Fire safety service (programs 300 and 302) can be attributed to commercial uses, or (.06) ($7,528,860) = $451,732. In addition to Fire Safety, commercial uses also impact program 308, Hazmat Response Unit. It is estimated that 25 percent of the 1986–87 program budget or (.25) ($36,130) = $9,033 can be attributed to commercial uses. Of the three programs the total cost is $460,765. Applied on a per acre basis the coast distribution is $460,765 divided by 1223 commercial acres = $377 per acre.

The following table is a summary of the annual revenues and costs associated with the proposed project:

Revenues	Alternative I	Alternative II
Sales Tax	$ 17,143	$ 23,916
Utility Taxes	1,132	1,132
Business License Fees	172	172
Lease Fees	207,931	289,531
Parking Fees	$1,226,400	$1,226,400
	$1,452,778	$1,541,151
Costs		
Police	$ 756	756
Fire	1,470	1,470
	$ 2,226	$2,226
Revenue minus Costs =	$1,450,552	$1,538,925
Revenue/Cost ratio =	652.64	692.3

Alternative I includes estimated annual restaurant income at $170 per square foot while Alternative II includes an annual income of $250 per square foot.

(9326d)

In conclusion, it is important to note that the above methodology is not intended to be all inclusive regarding all costs, revenues, and funding strategies pertaining to the proposed project and, in particular, the parking structure. As previously noted, this analysis has examined major revenues and costs that would impact the city's General Fund. An analysis that thoroughly discusses funding strategies and any additional operation costs not identified to date will be presented when the Conditional Use Permit application is submitted for the actual development of the proposed project.

STAFF REPORT

TO: Planning Commission
FROM: Community Development
DATE: September 15, 1987

SUBJECT: STATE BEACH GENERAL PLAN AND ENVIRONMENTAL DOCUMENTATION

APPLICANT: City of Huntington Beach

REQUEST: Establish goals, objectives and policies to preserve, enhance and encourage the recreational use of the beach area through adoption of a general plan for the subject area.

ZONE: DTSP District #10 & #11 (Downtown Specific Plan-District 10 and 11) and SL-O-C (Shoreline-Oil-Coastal)

LOCATION: 2.3 mile beach area northwesterly of the Huntington Beach Municipal Pier bounded by Pacific Coast Highway, the Pacific Ocean, the Huntington Beach Municipal Pier and the City's northwesterly boundary at Bolsa Chica State Beach.

1.0 SUGGESTED ACTION:

Recommend City Council and State Parks Commission adoption of the State Beach General Plan by adopting the attached resolution.

2.0 GENERAL INFORMATION:

The City of Huntington Beach has recently assumed responsibility for operation of the State Beach area north of the City Pier. As part of the City's new responsibility for operation of the State Beach, the State Department of Parks and Recreation requires that a number of documents be prepared and submitted to them for approval. Those documents are: (1) General plan; (2) Environmental Impact Element; (3) Resources Summary; and (4) Resource Inventory.

In order to prepare the above documents, the City has retained the services of Barrett Consulting Group.

C-5

Attachment #6

3.0 ANALYSIS:

On August 4, 1987, the Planning Commission held a public hearing on preliminary draft versions of the State Beach Resource Inventory, Resource Summary and General Plan. The intent of that public hearing was to inform the public that the plan was being prepared and to solicit initial comments and feedback. After taking public testimony, the Planning Commission summarized the concerns and comments to staff. Attachment 1 summarizes those comments and explains where they are addressed in the documents. Attachment 2 contains responses to written comments which were received.

The draft General Plan, as it has been prepared for adoption, is essentially an extension of the bluff top park from the pier northward to Bolsa Chica State Beach. The intent is to tie Huntington State Beach together with Bolsa Chica State Beach as a unified and complimentary recreational whole. For planning purposes, the subject beach area has been divided into three sub-areas. Area I extends from the Municipal Pier to 7th. Street, Area II extends from 7th. Street to Goldenwest Street, and Area III extends northward from Goldenwest Street. The draft General Plan proposes the following uses in each of the three areas:

Area I:

- Construct a tri-level parking structure at the existing parking lot site on the north side of the Municipal Pier. (This structure will not extend above the elevation of Pacific Coast Highway or beyond the existing bicycle path.)
- Provide for passive (surf museum) and active (volleyball, basketball, etc.) recreation both within and on top of the parking structure, respectively.
- Provide for a commercial (food) pad on top of parking structure.
- Remove existing concession stand from beach area and relocate as part of parking structure at beach level.
- Install permanent restrooms with parking structure.
- Expand the decking area on the northside of the pier to accommodate new food concessions.

Area II:

- Install permanent restrooms at points of access.
- Install parking spaces along service road.
- Provide for vehicular access to service road (and proposed parking stalls) from Pacific Coast Highway at Goldenwest Street and 11th. Street.
- Provide for concessions.

Area III:

- Realign and improve (landscaping) bicycle/pedestrian path.
- Provide off-street parking.
- Provide landscape/fence buffer between proposed parking lots and Pacific Coast Highway.
- Provide a buffer area between bluff edge and bicycle/pedestrian path.
- Install protective railing in the proposed buffer area.
- Install access facilities (stairs or roadway) at strategic locations.

As indicated above, the proposed improvements are recreational in nature and entirely consistent with the existing zoning and general plan. The parking components are intended to replace on-street parking on Pacific Coast Highway which will be lost when the street is re-striped and will in no way impact any portion of the existing bluff area. The remainder of the proposed improvements are landscaping and concession oriented. It should be noted that consistent with the nature of General Plans, the proposed improvements are at this time only conceptual in nature. By including them in the General Plan at this time, the City can then pursue the further design work and entitlements necessary to implement the plan.

Staff believes that the above listed improvements will be extremely beneficial to the City in providing access to and enjoyment of the beach area. Unfortunately, considerable controversy has arisen regarding the proposed parking structure adjacent to the pier. Contrary to an apparently perceived notion, the north side of the pier parking structure proposed by the General Plan is in no way intended to provide required parking for Pierside Village on the south side of the pier. The north side parking structure would only provide replacement beach parking as well as additional beach parking. Staff has proposed that the north side structure be constructed concurrently with the south side structure in order to provide optimum internal vehicular patterns, provide less costly construction, create less disruption to the beach area and provide replacement parking immediately. The entire parking structure would be below the existing grade of Pacific Coast Highway and would only cover the existing parking already on the site, with no expansion onto the sand area.

Additional controversy has arisen regarding the processing of the General Plan. There has been no attempt to subvert the public hearing process. The State Parks Commission's only scheduled meeting before Spring of 1988 is on October 9, 1987. In order for the General Plan to get on that meeting agenda, a compressed public hearing schedule is necessary. Staff informed the State Parks

Department that one public hearing to solicit comments had been held and that Planning Commission and City Council action would be requested prior to the State's October 9th. meeting. The State agreed with that schedule and has placed the General Plan on their October 9th. agenda. The City Council will hear the item on October 5, 1987.

For the Planning Commission's action on the plan, staff has prepared a resolution which approves the General Plan. The resolution contains all of the proposed components within each of the three beach sub-areas. The Planning Commission may add to or delete any of those components as they deem desirable. For example, conditions may be placed on some of the components to require such things as a maximum site coverage for parking on the oil road, or designs to minimize pedestrian/vehicular conflicts.

4.0 ENVIRONMENTAL INFORMATION:

Pursuant to Section 5002.2(a) of the Public Resources Code, the State Beach General Plan has been prepared in conjunction with an Environmental Impact Element. The draft EIE is incorporated in the document entitled State Beach General Plan. The State Clearinghouse has advertised the EIE for a 30-day review period to expire on September 21, 1987. All comments which have been received to date are forwarded to the Planning Commission with this staff report.

5.0 RECOMMENDATION:

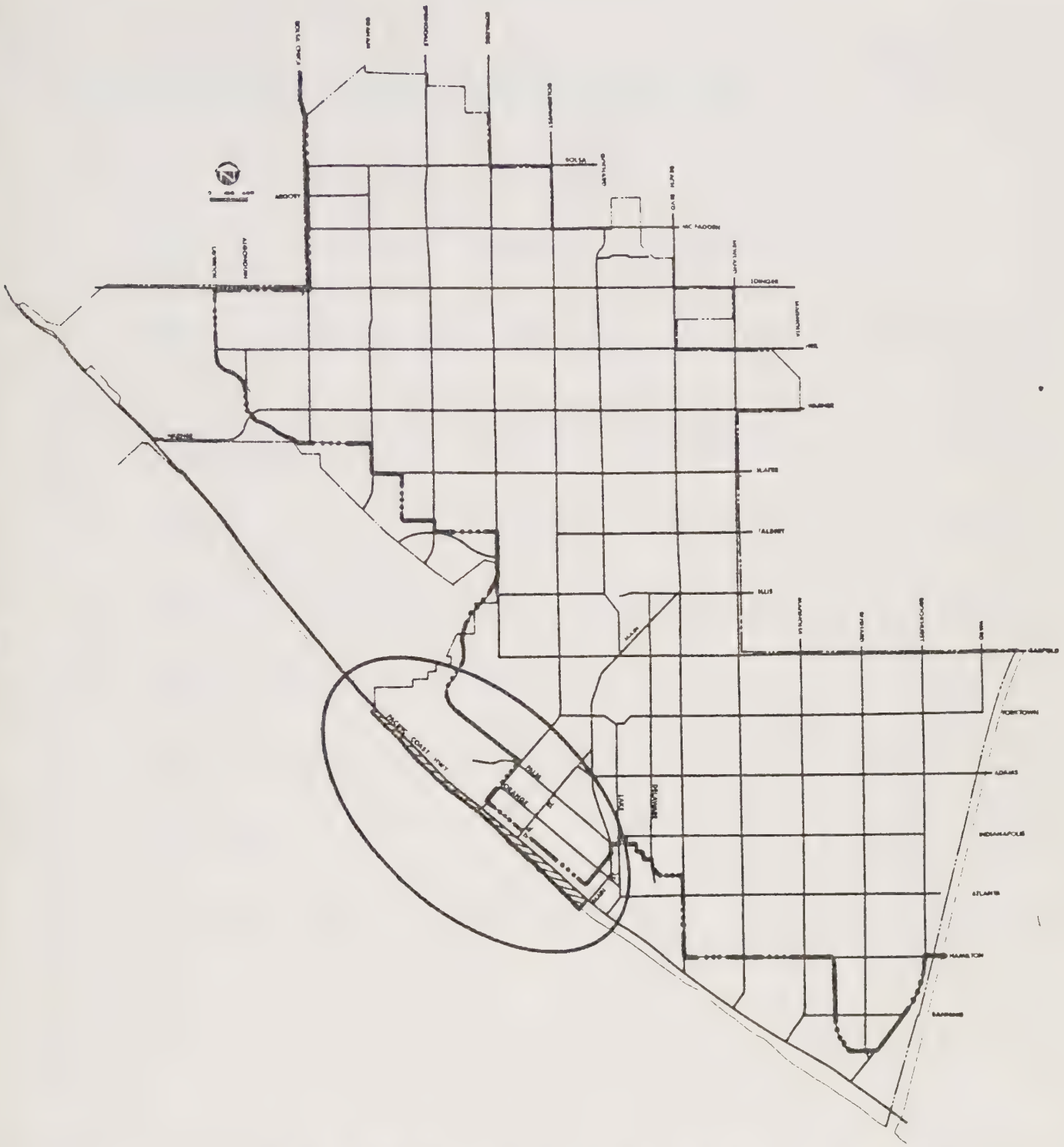
Approve the State Beach General Plan for recommendation to the City Council and State Parks Commission by adopting the attached resolution.

ATTACHMENTS:

HS

HS:kla

1. Area Map
2. Erratta Sheet
3. Resolution
4. Planning Commission comments and responses
5. Written comments and responses
6. Bolsa Chica State Beach Operative Agreement
7. State Beach General Plan and Environmental Impact Element
8. State Beach Resource Summary
9. State Beach Resource Element
10. State Beach Resource Inventory



GENERAL PLAN FOR STATE BEACH~HUNTINGTON BEACH/ ENVIRONMENTAL IMPACT ELEMENT

huntington beach planning division

ERRATA SHEET

The following items are to be added to, deleted from or modified as indicated in the draft State Beach General Plan:

1. Page 1, second paragraph - easterly should be westerly.

2. Page 1, third paragraph - northeast should be northwest.

3. Page 23, Ownership - (condominiums) should be (stock cooperative).

4. Page 23, Existing Unit Conditions - condominiums should be residential development; (328 spaces) should be (315 spaces).

5. Page 24, add the following to the end of the first paragraph. "Mobile concession vendors have also been introduced into this portion of the unit on a trial basis for the summer of 1987.

6. Page 24, Area III, first item, add to sentence .....south of Goldenwest Street.

7. Page 26, first sentence - replace "not clearly identified" with "limited".

8. Page 26, Area I - Add the following item to the list of recommended actions:

   Expand the decking area on the northside of the pier to accommodate new food concessions.

9. Page 37, Traffic/Circulation - (330 spaces) should be (315 spaces).

10. Page 37, Traffic/Circulation - (approximately 500 cars) should be (approximately 1,400 cars).

(9086d)

RESOLUTION 1385

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF HUNTINGTON BEACH, CALIFORNIA, RECOMMENDING APPROVAL OF THE STATE BEACH GENERAL PLAN

WHEREAS, the City of Huntington Beach has assumed responsibility for operation of Bolsa Chica State Beach north of the Municipal Pier; and

WHEREAS, the California Public Resources Code requires that a General Plan be prepared for the Bolsa Chica State Beach area for approval by the State Park and Recreation Commission; and

WHEREAS, the City of Huntington Beach is the responsible agency for preparation of the State Beach General Plan; and

WHEREAS, a public hearing was held on August 4, 1987, to solicit public input in preparation of the State Beach General Plan; and

WHEREAS, the components listed in Exhibit 1 are recommended for inclusion in the State Beach General Plan; and

WHEREAS, the State Beach General Plan and all of its recommended components are consistent with the City of Huntington Beach Zoning Code and General Plan; and

WHEREAS, a public hearing on approval of the State Beach General Plan was held by the Planning Commission on September 15, 1987, in accordance with provisions of the State Government Code.

NOW, THEREFORE, BE IT RESOLVED that the Planning Commission of the City of Huntington Beach, California, hereby approved said State Beach General Plan.

BE IT FURTHER RESOLVED that said State Beach General Plan is recommended for approval by the City Council of the City of Huntington Beach, California, and by the State Park and Recreation Commission.

PASSED AND ADOPTED BY THE Planning Commission of the City of Huntington Beach, California, on the 15th. day of September, 1987, by the following roll call vote:

AYES:
NOES:
ABSENT:
ABSTAIN:

ATTEST:

Secretary, Planning Commission

Planning Commission Chairman

(9058d)

EXHIBIT I

Area I:

- Construct a tri-level parking structure at the existing parking lot site on the north side of the Municipal Pier. (This structure will not extend above the elevation of Pacific Coast Highway or beyond the existing bicycle path.)
- Provide for passive (surf museum) and active (volleyball, basketball, etc.) recreation both within and on top of the parking structure, respectively.
- Provide for a commercial (food) pad on top of parking structure.
- Remove existing concession stand from beach area and relocate as part of parking structure at beach level.
- Install permanent restrooms with parking structure.
- Expand the decking area on the northside of the pier to accommodate new food concessions.

Area II:

- Install permanent restrooms at points of access.
- Install parking spaces along service road.
- Provide for vehicular access to service road (and proposed parking stalls) from Pacific Coast Highway at Goldenwest Street and 11th. Street.
- Provide for concessions.

Area III:

- Realign and improve (landscaping) bicycle/pedestrian path.
- Provide off-street parking.
- Provide landscape/fence buffer between proposed parking lots and Pacific Coast Highway.
- Provide a buffer area between bluff edge and bicycle/pedestrian path.
- Install protective railing in the proposed buffer area.
- Install access facilities (stairs or roadway) at strategic locations.

(9088d)

TO: HAL SIMMONS RE: 72100-87.25

FROM: FRANK HASELTON

SUBJECT: RESPONSE TO PLANNING COMMISSION COMMENTS PERTAINING TO THE RESOURCE ELEMENT/SUMMARY

Date: August 5, 1987

The following summarizes the issues raised by the Huntington Beach Planning Commission at their regularly scheduled meeting of August 4, 1987. Also included are comments by the general audience. There are recommedations following each comment.

Livengood: Alternatives for offsite parking; utilization of tram service; recommended feasbility study to determine saturation factor of commercial uses around pier area; encourages location of surf museum.

Response: Parking/circulation issues will be addressed in EIR; feasibility study may exist in a different format within City's redevelopment documents--it is not within the State Dept. of Parks and Rec. parameters; surf museum will be included in interpretive elements of General Plan.

Summerfell: Encouraged location of surfing museum

Response: (see Livengood)

Leipzig: Concerned about absence of littoral drift comments within R.I. & R.S.; pier should be scenic resource.

Response: Littoral drift issues are discussed within Soils Section of R.I.-it will be included in the R.S. and EIR; the RI has been amended to include the pier as a scenic resource.

Pierce: Raised issues concerning conflict among bike/ pedestrian path and vehicular roadway.

Response: This will be addressed in EIR.

Higgens: Encouraged surf museum and recreation on top of proposed parking structure; need for permanent toilet facilities and showers along beach; suggested concessions near 20th Street; need for seating in Areas II & III; recommended underground utilities.

Response: Surf museum and roof top recreation will be addressed in General Plan as well as of toilet and shower facilities; concession elements will be discussed

within concession element; seating areas will be addressed in General Plan; utilities will be discussed in EIR.

Schumacher: Raised issue of bluff erosion; opposes restaurant on top of parking structure.

Response: Bluff erosion issues will be addressed in EIR; restaurant is a conceptual element of Area I of the General Plan.

Silva: Raised issue of providing buffer between parking and PCH in Area III; conflict between bicycle and pedestrian traffic.

Response: Buffer between PCH and parking will be part of General Plan; bicycle/pedestrain conflict will be addressed in EIR.

Surfing Museum: Raised issue to include surf museum within Area I of General Plan.

Response: Surf museum could be included as a conceptual part of General Plan and addressed in interpretive element of General Plan.

Respectfully submitted,

Barrett Consulting Group Inc. (BCG)

Frank L. Haselton
Project Manager

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